CHALLENGES FOR OIL AND GAS MARKETS IN A LOWER PRICED ENVIRONMENT

David C. Carroll
President, International Gas Union

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YPFB Gas & Petroleo V Congreso Internacional 2015
MEMBERSHIP COVERS 97% OF THE WORLD’S GAS MARKET

Bolivia, Plurinational State of Yacimientos Petroliferos Fiscales Bolivianos

91 Charter Members
43 Associate
Founded in 1931

IGU Secretariat
Oslo
Norway
As the global voice of gas, IGU seeks to improve the quality of life by advancing gas as a key contributor to a sustainable energy future.
MISSION

• Advocate the political, technical and economic progress of the global gas industry, directly and through its members and in collaboration with other multilateral organizations.

• Improve the competitiveness of gas in the world energy markets by promoting transparency, public acceptance efforts and the removal of supply and market access barriers.

• Collaborate with governmental agencies and multilateral organizations to demonstrate the economic, social and environmental benefits of gas in the global energy mix.

• Support the development of new technologies and best practices, while emphasizing sound environmental performance, safety, reliability and efficiency across the entire value chain.

• Maximize the value of its services to members and other stakeholders.
WORLD GAS CONFERENCE JUNE 2015
PARIS, FRANCE

WGPCPARIS2015 IN NUMBERS

THOUSANDS OF TRADE VISITORS ATTENDING FROM ALL OVER THE WORLD

3700 DELEGATES

113 SPEAKERS

570 CONFERENCE SESSIONS AND HUNDREDS OF HOURS’ WORTH OF INSIGHTFUL CONTENT

45,000m² EXHIBITION SIZE

350 EXHIBITORS

90 COUNTRIES REPRESENTED
OUTLOOK FOR GAS – Demand growth of 2% annually
• Expected demand growth will make gas the biggest fossil fuel in use by 2040
• LNG will play a critical role in meeting demand with annual growth rates of 4-5%
• Despite rapid deployment of renewable energies, fossil fuel market share will remain very large. In this context, gas is a destination fuel.
• Policy frameworks however need to develop in support of gas

THE ROLE OF GAS IN THE ENERGY MIX
• Gas is a major contributor to reducing carbon emissions and cleaning polluted air
• Switching power generation from coal to gas maximizes short-term impact
• Gas is a partner to renewable energies enabling their greater adoption
• Ahead of COP 21, call by 6 “majors” for a global carbon mechanism and price

WHY THE GAS INDUSTRY NEEDS TO ACT TO SECURE ITS OWN FUTURE
• Greater and more effective advocacy is needed to raise the voice of gas
• Need to focus on reduction of environmental footprint and reduce costs
• Need to create new markets, continue to focus on technology and innovation
USA PRESIDENCY
AREAS OF STRATEGIC IMPORTANCE

MARKETS
-INCREASING OPPORTUNITIES
-REMOVING BARRIERS

ACCESS
-SUPPLY
-INFRASTRUCTURE

SOCIAL LICENSE
-COMMUNITY ENGAGEMENT
-SAFETY AND RELIABILITY
-ENVIRONMENTAL IMPACT
-ENERGY EFFICIENCY
WORLD GAS VOLUMES

SOURCE: BP STATISTICAL REVIEW OF WORLD ENERGY; INTERNATIONAL GAS UNION, WORLD LNG REPORT
OIL & GAS PRICING

SELECT GAS PRICES

$/MMBTU

SELECT OIL PRICES

$/BBL

SOURCE: ENERGY INFORMATION ADMINISTRATION, INTERNATIONAL MONETARY FUND
COMPETITIVENESS OF HENRY-HUB BASED LNG

COMPETITIVENESS OF HENRY HUB BASED LNG FROM GULF OF MEXICO INTO EUROPE AND ASIA (FULL COST)

ESTIMATED US-BASED LNG IN JAPAN VS. JAPAN BORDER

ESTIMATED US-BASED LNG IN EUROPE VS. NBP

COMPETITIVENESS OF HENRY HUB BASED LNG FROM GULF OF MEXICO INTO EUROPE AND ASIA (VARIABLE COST)

ESTIMATED US-BASED LNG IN JAPAN VS. JAPAN BORDER

ESTIMATED US-BASED LNG IN EUROPE VS. NBP

SOURCE: ENALYTICA BASED ON EIA; TRADE STATISTICS OF JAPAN; INTERCONTINENTAL EXCHANGE (ICE UK)
From its peak on September 12, 2008, the U.S. natural gas rig count has dropped from 1,606 to just 268 as of last Friday, or a drop of 83%. U.S. natural gas production has continued to hit record highs, due to the prolific Marcellus shale and the rise in "associated gas" production from shale oil-producing fields, but we don't believe this will last for long.
As Daniel Yergin recently noted: “Even before the collapse in prices, oil and gas majors had become preoccupied with the continually rising costs of developing new supply and were heeding the call from investors for ‘capital discipline’.”
<table>
<thead>
<tr>
<th>Region</th>
<th>Challenges and Opportunities</th>
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<tbody>
<tr>
<td>North America</td>
<td>Exploit shale resources for positive economic and environmental benefits, continue to earn social license, secure export approvals</td>
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<tr>
<td>Europe &amp; CIS</td>
<td>Decarbonization, integration of gas with renewables, diversify supply sources, security of demand</td>
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<tr>
<td>Asia</td>
<td>Develop gas resources, indigenous and imports, at affordable prices to fuel growing economies and clean the air</td>
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<tr>
<td>South America</td>
<td>Develop plentiful resources, encourage trade, improve regional connectivity, regulatory reform and improve investment climate</td>
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IMPORTANT UPCOMING EVENT

International Gas Union Council Meeting
October 20 - 23, 2015
Cartagena, Colombia