The Sixth International Energy Week: 
Natural gas part of the long term solution

Moscow, 24 October 2011

Hans Riddervold
Director
International Gas Union
International Gas Union represents more than 95% of the global gas market

- 78 Charter Members
- 40 Associate Members
Natural Gas – the fuel with a voice!

Vision of International Gas Union:

The most influential, effective and independant NGO,

while serving as the spokesman for the gas industry world-wide

- Natural Gas – the fuel with a voice!
Key success factors

- Create Trust
- Educate
- Advocate
- Energize

The rational middle
Creating Trust for Gas

- Open minded
- Knowledge seeking
- Balanced and objective
  - Realising gas is part
  - Environment concern
- Simple messages
- Clear language
- Humble
Creating Trust:
Energy - The World needs it all

Renewables

Nuclear

Fossil fuels
Educate:
Complexity of energy supply

Gas pipeline transport up to 6000 kms

Electricity transport up to 400 kms
Educate:
How to avoid misconception

Some people ask:
Why not use electricity to run generators to making energy for homes?

Wrong

There is an enormous need for educating the public to understanding the complexity of making energy reliable for industry and private consumption.

Right

- Wind, solar
- Hydro, bio
- Nuclear
- Coal, oil, gas
Gas Supply Networks

- Physical Networks
  - From regional to global
- Finance Networks
  - Predictability and Profitability
- Political Networks
  - Energy Security and Sustainability
Physical Network
Infrastructure - key to energy security

Source: IEA
Physical Network
LNG – the Global market Catalyst
Funds for new projects are available: Critical factors are

- Attractiveness and incentives to invest in R&D and in projects
  - Exploration and production
  - Pipelines
  - LNG infrastructure
- Predictable regulatory conditions
- Country and regional stability
- Acceptable rate of return
Political Networks
Areas for balancing challenges

- Security of Supply
  - vs Demand (Energy security)
- Sustainability Goals
  - vs Energy Demand
- Lifecycle Footprint Exposure
  - vs Operational Footprint
- Sources of Energy
  - vs Industry and Employment
- Regulatory Conditions
Regulatory challenges

- Large investment risk vs Long term energy security
- Historical rights vs Future terms
- National policies vs Cross border grids/networks
- Third party access: Negotiated vs Regulated terms
- International law (EU) vs National legislation
- Liberalisation vs Interest of national companies
Advocate: Key messages

Gas: Part of the long term energy solution
Abundant natural gas reserves

Proven conventional reserves* are growing

In addition:
Unconventional gas has come within technological & economic reach

The total long-term recoverable gas resource base is more than 850 tcm, only 66 tcm has already been produced.

- IEA-WEO2009 -

* 185 tcm in 2008
Affordable: Competitive option for new generation

Low All-in Unit Costs per kWh produced

Based on 7000 hrs operation for gas and coal

Prices (at plant inlet)
Gas: 8 $/MMBtu
Coal: 80 $/t

Source MMD

Capital costs of options may vary considerably in absolute terms, but very little in relative terms
Natural Gas with or w/o CCS is the cleanest fossil fuel

Metric Tons CO₂ per MWH

Solar Nuclear Wind (0)

"Clean" Natural Gas* (0.05)

"Clean" Coal* (0.13)

Oil (0.91)

Coal (0.98)

Natural Gas (0.37)

* With CCS

Source: IHS Cera/ IGU
Gas fired power

47% lower GHG emission on life cycle basis than coal
Gas for pairing with renewables

Fabulous renewable resources:
- Windpower needs wind
- Solar power needs sun

Ideal pairing resource
- Gas quickly in operation when sun and wind temporarily is gone
Energizing

- Gas is abundant, affordable and acceptable
- Gas is more than a bridge to a sustainable energy future
- Existing gas infrastructure is huge and catalysing
- Policy shapers instrumental in securing beneficial framework for investments
- Predictable frame conditions and regulatory regimes create growth
- Our message must reach the common community

The role of Natural Gas must be better reflected in policy papers
Energizing: Some rules are still valid…

It's not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change.

Charles Darwin
Большое спасибо за внимание!

The next highlight: Kuala Lumpur, Malaysia

25rd World Gas Conference and Exhibition
4 – 8 June 2011