International Gas Union

4th Session of the UN Economic Commission for Europe

Geneva, 30 March 2011

Hans Riddervold
Director
IGU represents around 95% of the global gas market.

- **74 Charter Members**
- **35 Associate Members**

News, Views and knowledge on Gas - World Wide
IGU vision: 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!
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

0
0.25
0.5
0.75
1

Solar
Wind (0)
Nuclear
"Clean" Natural Gas* (0.05)
"Clean" Coal* (0.13)
Natural Gas (0.37)
Coal (0.98)
Oil (0.91)

GHG Emissions

* With CCS

Source: IHS Cera/ IGU
Gas Supply Networks

- **Physical Networks**
  - From regional to global

- **Finance Networks**
  - Predictability and Profitability

- **Political Networks**
  - Energy Security and Sustainability
Physical Network
Natural Gas Infrastructure in Europe

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 R&D and in projects
  - Exploration
  - Pipelines
  - LNG plants, terminals and storage
  - LNG carriers

- 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
- Sources of Energy: 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
Messages from the Natural Gas Community

- 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 to secure beneficial framework for investments
- Predictable frame conditions and regulatory regimes create growth

→ The role of Natural Gas must be better reflected in policy papers