High-Level Workshop

« Completion of the Single European Market for Electricity and Gas:

Striking the Balance between Competition and Energy Security »

Berlin, 29-30 March 2007

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THE EUROPEAN UNION OF THE NATURAL GAS INDUSTRY

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I. Introduction: FACING CRITICAL CHOICES

2006 a memorable year:

- Winter events and the debate on security of supply
  - Relations with producers
  - Diversification
  - Solidarity and Storage
- Green paper on energy
- External developments and relations with producers

2007 : the year of critical choices

- The energy policy for Europe
- The EU-Russia, and other partnership with producing countries
- Security of Supply and Gas Coordination Group

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THE MAGIC TRIANGLE

Competitive European internal market

Regulation reflecting operational realities
Madrid Forum
Implementing existing regulation

Natural Gas
Third Package
High Level Group

Security of supply

Growing share of natural gas
Global dimension
Regulatory framework conducive for new investments
Security of demand

Sustainable energy system

Cleanest fossil fuel
Growing use for power generation
New appliances

BUT HOW?

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II. Facts: Impact of the global commercial and geo-political environment on the Natural Gas business

- The new energy and Natural Gas environment has and will have a long lasting impact on public authorities and industry
- Facts :
  - Growing dependency of (W) Europe on external supply sources (80% in 2030)
  - Europe competing with other regions
  - Diversity of suppliers, is limited (Russia, Algeria, Norway, Qatar, Libya, Iran, Egypt, etc…)
  - Oligopolistic trends of producers
  - Security of Supply vs Security of Demand
  - Role of Geo-politics (Belarus, etc.)

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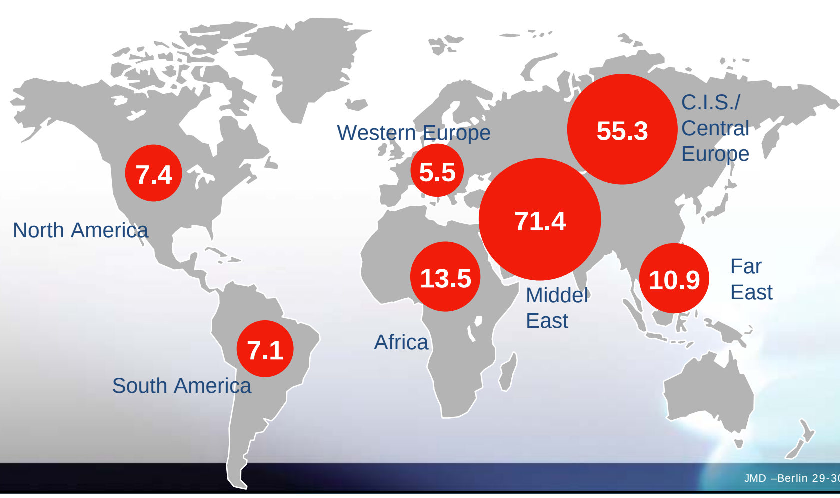
World Gas Reserves

proved recoverable natural gas reserves: 171.1 trillion m³



Source: E.ON Ruhrgas AG

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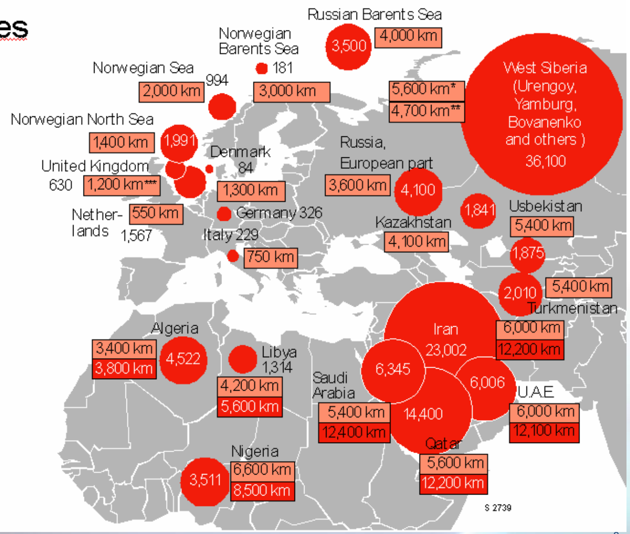
Natural Gas Reserves and Supply Distances



billion m³

Pipelineto Frankfurt/Main

LNGto Wilhelmshave

*Yamburg Area
**Yamal Peninsula
***northern area

1 m³ = 11.5 kWh

Source for natural gas reserves: Oil and Gas Journal, Norwegian Petroleum Directorate, others

Source: E.ON Ruhrgas AG

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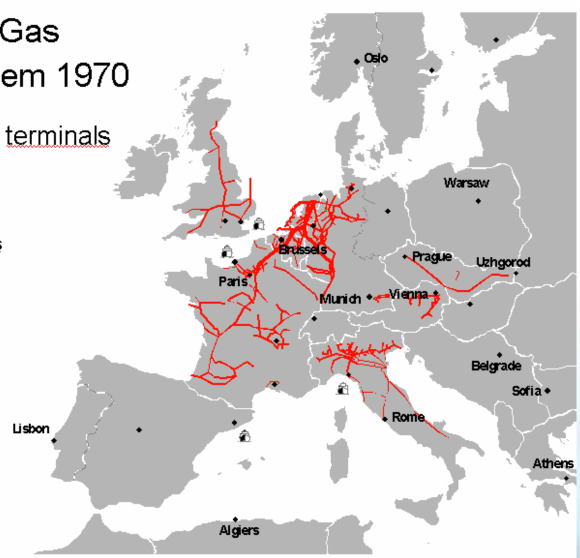
European Natural Gas Transmission System 1970

pipelines/LNG receiving terminals

- natural gas pipelines in European grid
- other pipelines
- LNG receiving terminals



ce: E.ON Ruhrgas AG

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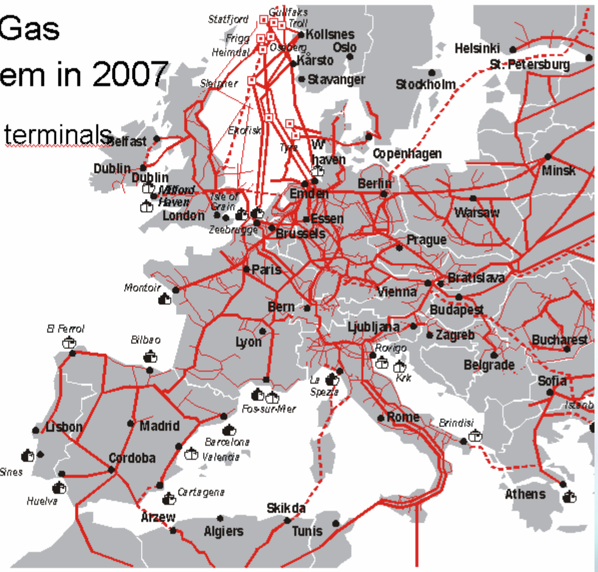
European Natural Gas Transmission System in 2007

pipelines/LNG receiving terminals

- existing
- planned or under construction



Source: E.ON Ruhrgas AG

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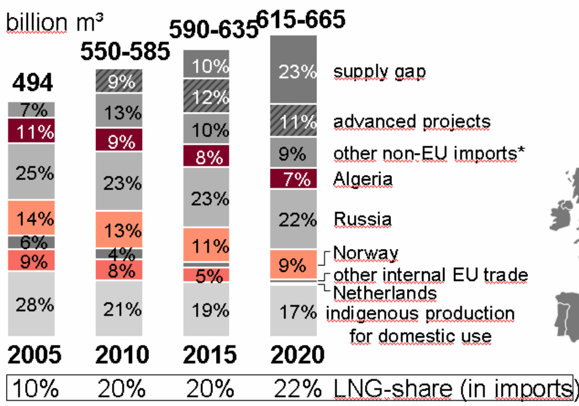
Development of Natural Gas Supplies in EU 27



provisional data for 2005
*) of which: Nigeria 3%, Qatar 3%
Basis for imports: Contracted volumes and prospective contract prolongations
Russia without volumes via Nord Stream which are included in advanced projects

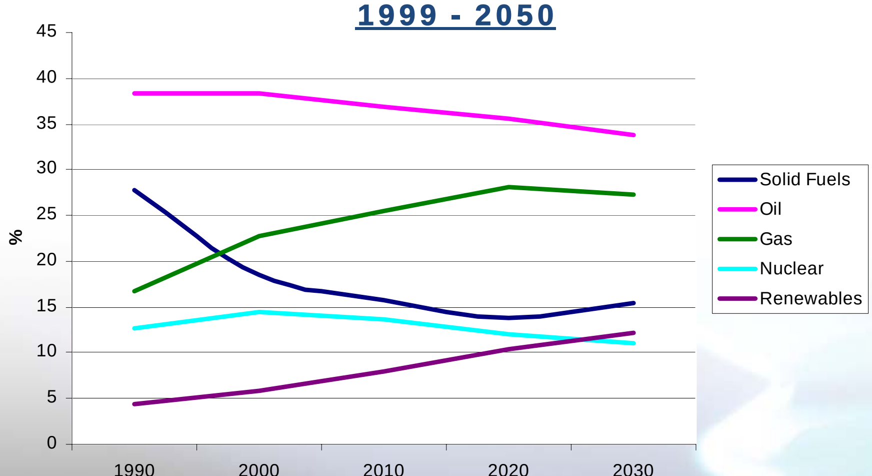
Remark:
Malta and Cyprus are not supplied with natural gas

Source: E.ON Ruhrgas AG

European gas market-major trends

- Expected growth of gas market share in Europe primary energy demand
  - from 23% in 2000 to 27% in 2030
  - almost + 40% demand increase over 2005-2030
- However – 1,1% consumption in 2006 according to Eurogas statistics
- Driven mainly by power generation
  - Uncertainties:
    - Gas prices
    - Share of nuclear and renewable energy
    - Diversification of sources for security of supply reasons – confidence in gas supply reliability
    - Cleanest fossil fuel – role in future energy mix

Share of natural gas in EU total energy consumption 1999 - 2050



***Source*: European Commission (Green Paper Background document)**

III. Opportunities and risks for Europe future gas supplies

Responses:

-> Diversity of supply sources and transit routes

-> Key role of long term contracts (supply + transit)

-> The business and regulatory framework must encourage large-scale investments with long lead time

-> Security of supply combined with flexibility instruments; including **commercial instruments** (e.g. long term contracts with interruptible clauses) and **physical instruments** (ex. storage etc)

-> Development of hubs, LNG business etc

-> The market must be efficient in evaluating and aggregating demand in a timely manner

-> Regarding the situation of seasonal storage :

- Need to mobilise all sources of flexibility including demand side management and interruptible contracts
- Need to enhance the flexibility in import contracts to the maximum extent possible

-> Role of strategic storage ?? => recognizing national/regional approaches

III. Opportunities and risks for Europe future gas supplies
OTHER ISSUES IN RELATION TO GAS IMPORTS

- Several gas producers tend to take positions along the whole gas chain while preserving their upstream positions

- Several European energy companies seek positions both upstream and downstream

-> Eurogas views :

-> an issue that policy makers have to consider

-> reciprocal willingness to open markets must continue to be encouraged at political level and reciprocity on a cooperation basis

- The financial and commercial stability and credit worthiness of European gas companies will remain a key for Europe's attractiveness
  -> importance of assets
- The issue of oil/gas price indexation :

-> Eurogas views : to leave negotiating parties freedom of choice of the price formula corresponding to their needs (as for other contractual elements)

- Recent Energy Charter Secretariat study on international pricing methodologies

MAIN RESULTS OF ENERGY CHARTER STUDY
ON INTERNATIONAL OIL/GAS PRICING MECHANISM

Oil:
Liquid markets are **not** necessarily competitive markets

Gas is unlikely to follow oil soon:
Lower energy density means higher specific costs for transport and storage
=> Hindrance to a global market and to liquid market places

Major factors for gas pricing mechanisms:

- Resource rent optimisation by resource owning country
- Import dependence => **Limited regulatory reach**
- High specificity of pipelines, tying partner for a long time together

Long Term (Import) Contracts:
- concept for **international** gas trade developed by the Netherlands in 1962
  - Predominant part of international gas trade
  - Increasingly replaces annual compensation deals in FSU countries
- LTCs able to adopt to changes, e.g. reduction in fuel oil pegging
- LTCs a reality of international trade which can only be changed by consensus

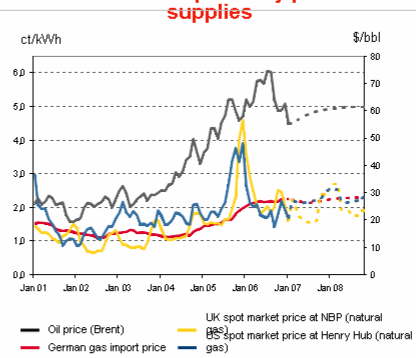
LNG:
- Bulk still under long term contracts (for financing)
- Now flexibility for opportunity driven changes
- Serves as price transmitter (of high prices so far), **but** no market place

Long Term Import Contracts and Supplies to Europe’s Natural Gas Market

Characteristics of long-term import contracts

- Private-sector contracts between producers and importers
- Long-term supply assurances by producers
- Take-or-pay commitments for importers
- Prices based on fair market value of the natural gas (pegged to rival fuels)
- Long-term agreements provide basis for financing new large production and transmission projects
- Volume flexibility in contracts allows supply in line with varying demand situations

Indexation to rival fuels ensures competitively priced supplies



Source: E.ON Ruhrgas AG

IV. Trends at Industry level

- Need for competitive and financially strong European companies in a challenging world
- (W) European companies to expand both upstream and downstream
- Need for a supportive and stable regulatory environment (Who will invest ?)
- Achievements are considerable but stability needed for appropriate future decision.
- Need for strong and diversified portfolios :
  - Long term contracts will remain a backbone
  - Developments of hubs, spot etc…
  - Growing role of LNG
  - Importance of assets
  - Security of Supply tools (Both physical and contractual)
  - Storage and LNG terminals
- Industry to adapt : major restructuring (e.g. mergers and acquisitions…)

➡ **AN INDUSTRY VISION**

V. The Public policy debate

- Growing concerns on Security of Supply and diversity
- Focus on “EU monitoring”, “solidarity”, “Strategic Storage” (Role of gas coordination group – Directive 2004/67/EC)
- Growing interest/involvement of public authorities in energy issues (both “internal market” and “external policy” – need for consistency)
- Growing oligopolistic nature of production and dialogue with producers

  A «GAS OPEC»?
- Who does what ? EU speaking with one voice but tensions between approaches
  - National-Bilateral - Industry
  - Regional - Commission
  - Multilateral - Member States
- The need for Public Private Partnership

Identification of some Key Issues of the EPE

- A low carbon economy
- Completion of Internal Market with open competition and "effective regulation" (by Januar 2009)
- Unbundling options – what objectives? Which proportionality?
- Investments
  - Who is in charge? Major infrastructures
  - Incentives
- European wide regulatory function: options
- Transparency
- Solidarity and security of supply
- External relations - Reciprocity
- LTC
  - Upstream
  - Downstream
- Rights of consumers and energy as a public service
- Others – Need for Impact Assessment

VI. Some Conclusions: achieving the right balance

- Eurogas generally welcomed the conclusions of the EU Council of Heads of State and Governments (March 2007)
- Continuous dialogue with Institutions
- Eurogas views developed in detail
  - « Looking Forward » Position Paper
  - Letter to COREPER
  - Others
- Clear support to internal market completion
  - Effective implementation of Directive 2003/55/EC
  - More EU regulatory consistency/harmonization: role of Commission, regulators and of market players
  - TSO legal and operational autonomy: promoting credibility and effectiveness
  - Madrid process, regional initiatives, etc…
  - Keeping all INVESTMENT ROADS open
  - Unbundling proposal: need for proportionality and investment friendly approach
  - Fair Competition
- Support to entrepreneurial freedom and choice of portfolios

Some Conclusions: Achieving Consistency

- Any future legislation should preserve ability of energy companies to:
  - Become globally competitive
  - Invest in all segments of gas chain
  - Determine their portfolios/ strategies
- If new legislation proposed it must be based on effective
  - Impact assessment and cost benefit
  - Proportionality in objectives/means
- Energy suppliers need tools and international negotiation strength and credibility
- EU External Policy to support Dialogue/Partnership reciprocity with producing countries

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Regulation reflecting operational realities
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Security of supply

Growing share of natural gas
Global dimension
Regulatory framework conducive for new investments
Security of demand

Sustainable energy system

Cleanest fossil fuel
Growing use for power generation
New appliances

OUR COMMON CHALLENGE