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1) Introduction

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
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)
  – 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.)
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 ?)
- 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...)
The Public policy debate

- Growing concerns on Security of Supply and diversity
- Growing interest/involvement/interference of public authorities in energy issues (both “internal market” and “external policy” – need for consistency)
- Growing oligopolistic nature of production and dialogue with producers
- Who does what? EU speaking with one voice but tensions between approaches
  - National-Bilateral - Industry
  - Regional - Commission
  - Multilateral - Member States
- Market should provide first response
- The need for Public Private Partnership

• Content
  – Strong Focus on **Sustainable Development and Environmental/Climatic issues**, e.g.
    • Reduction of Emissions by 20% in 2020 (or 30% if international agreement)
    • Energy Efficiency
    • Moving towards “Low Carbon” Energy
Process/Timing

- The Energy Package was officially presented by the Commission on 10 January 2007
- Addressed to other EU Institutions and Member States
  - COREPER Working Groups Review
  - EU Energy Council (15 February 2007)
  - EU Council of Head of States (8-9 March 2007)
- No fixed deadlines for formal legislative proposals but guidance expected from March Council
- A lot will depend on (key) Member States reactions
- Consequences on advocacy
Identification of Key Issues

• Completion of Internal Market with open competition and “effective regulation” (by January 2009)
• Unbundling options
• Investments
  – Incentives
  – Who is in charge? Major infrastructures
• European wide regulatory function: options
• Transparency
• Solidarity and security of supply
• LTC
  – Upstream
  – Downstream
• Rights of consumers and energy as a public service
• Others – Need for Impact Assessment
Eurogas Messages/Questions

- Eurogas generally welcomes the conclusions of the EU Energy Council of 15.02.07

- Eurogas views developed in detail
  - « Looking Forward » Position Paper
  - Letter to DG COMP

- Background Position: The Balance achieved in 2003 Directive should not be modified, e.g. sensitive issues such as unbundling

- Clear support to Internal Market completion
  - More EU regulatory consistency/harmonization
  - TSO legal and operational autonomy
  - Non discriminatory TPA
  - Others

- Support to entrepreneurial freedom and choice of portfolios
Eurogas Messages/Questions

• Any future legislation (if at all) should preserve ability of energy companies to:
  – Invest in all segments of gas chain
  – Determine their portfolios

• Energy suppliers need tools and international negotiation strength and credibility

• If new legislation proposed it must be based on effective
  – Impact assessment
  – Cost benefit
2) **Major trends in the world gas market and the impact on security of supply**

- Facts and Figures -
Major trends in world gas market

- World energy demand is increasing -> + 50% by 2030 (IEA)

- Expected higher growth rates for gas than oil and coal, gas becoming the second most important fuel from 2020

- POWER GENERATION = the main driver of gas demand
  - With uncertainties about prospects for gas prices and the use of renewables and nuclear energy, energy efficiency
Natural Gas resources are abundant...

- R/P ratio 60-65 years, based on proven gas reserves -> compared to a R/P ratio 40 years for oil

- R/P ratio 100 years if estimated undiscovered gas reserves were to be proven

- Highest production growth expected in the Middle East
... But they are concentrated in few regions, mainly in Russia and the Middle East
Regional Share of gas production

**Source:** IEA, World Energy Outlook 2004
The expected growth of import needs will boost international trade - Competition for gas will grow

Natural gas import needs per region

Source: Wood Mackenzie, industry
Development of resources will require huge investments

- Investments needed along the whole gas chain worldwide to ensure supplies:
  -> USD 3.1 trillion until 2030 / 60% upstream (IEA 2005 WEO forecast)

- Major challenge: financing investments on non-OECD countries, where half of investments needs are situated.
3) **Major trends in gas market**  
**Focus on Europe**
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

• 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
Share of natural gas in EU 25 total energy consumption

Source: European Commission (Green Paper Background document)
The decline of European domestic production

Source: industry estimate
Gas demand trends and the decline of domestic production mean:

- A significant increase in import dependency
  - share of imports in Europe gas supplies will rise from 54% in 2004 to 84% in 2030 (European Commission estimates)

- A growing supply gap
  - > a major challenge in terms of sourcing and infrastructure building
Development of Natural Gas Supplies in EU25

<table>
<thead>
<tr>
<th>Year</th>
<th>EU Production</th>
<th>Other Non-EU Imports*</th>
<th>Russia</th>
<th>Norway</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>10%</td>
<td>23%</td>
<td>10%</td>
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<td>20%</td>
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<tr>
<td>2010</td>
<td>20%</td>
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<td>2020</td>
<td>22%</td>
<td>10%</td>
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Billion m³

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Remark:
Malta and Cyprus are not supplied with natural gas.

provisional data for 2005
*) of which: Nigeria 3%, Qatar 3%
Basis for imports: Contracted volumes and prospective contract prolongations
Russia without volumes via North European Gas Pipeline (NEGP) which are included in advanced projects
Russia, Algeria and Norway will continue to provide a huge share of European gas imports

1. **Supplier: RUSSIA / alm. 25% of EU gas supplies**
   - Huge export potential at economic reach of Europe, but could be affected by several factors
   - Issue of EU’s dependence not to be ignored, but Eurogas is confident in stability of business relations. Impact of Russia-Ukraine crisis not to be over-estimated

2. **Supplier: NORWAY / 13% of EU gas supplies**
   - Current export capacity sustainable over long term
   - Recent government's announcement on export capacity expansion

3. **Supplier: ALGERIA / 10% of EU gas supplies**
   - Current export capacity sustainable over long term
   - Large undeveloped reserves

Other sources will continue to play an important role in diversifying and filling in the supply gap

→ mainly North Africa, the Middle East, Central Asia
4) **Opportunities and risks for Europe’s future gas supplies**

- Facts and Figures -
Opportunities and risks for Europe’s future gas supplies

New infrastructures will be needed

• CHALLENGES:
  – Increasing demand and new supply sources
    ⇒ growing importance of flows from east and south
    ⇒ Infrastructure needs: need “mega” projects (e.g. Nabucco...) and LNG
  – New patterns of use (esp. electricity generation)
    ⇒ increased need for swing capacity
  – Liberalisation => new investment climate
    Risk of postponement of investment decisions due to unstable regulatory framework in process
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
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 keeping closed 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 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).

- The financial and commercial stability and credit worthiness of European gas companies will remain a key for Europe’s attractiveness.
  -> importance of assets.
5) Delivering security of supply in a competitive gas market
New market conditions mean a more European approach is necessary

• Diversification must be a key objective

• A shared understanding on the supply/demand balance has to be developed at European level

  -> Work started by DG TREN (Energy Supply Observatory); Producing countries should be involved.

• MS remain responsible for setting their specific national security of supply standards: importance of meeting common principles of approach

  -> based on Directive 2004/67 on security of supply
  -> cooperation and exchange of information (gas coordination group, EU Strategic Energy review)
  -> monitoring and solidarity
HOW EUROGAS CONTRIBUTES TO ENSURING RELIABLE SUPPLIES TO EUROPE?

Eurogas is actively involved in EU policy making and Dialogues between authorities and industry, as illustrated by its:

1. Participation in the Gas coordination Group

2. Participation in the work of the Thematic Groups in the framework of the EU-Russia Energy Dialogue, other similar dialogues with producers/consumers & countries

3. Cooperation between Eurogas and the Russian Gas Society
6. Conclusions

- Security of supply must be an equally important objective as the creation of an open and competitive gas market.

- Consistency in objectives and policies

- EU approach must aim at:
  - Available supplies of gas for Europe at short and long term.
  - Reliable supplies at competitive prices
  - Effective market mechanisms

- Building confidence with our partners