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The Gas Target Model: The European gas market for 2014 and beyond

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Changing landscape of world gas trade

- US will be net exporter in 2017
- Australia’s LNG exports will grow significantly
- Russian exports will rise
- Europe’s import dependence will grow
European gas market at a crossroad

Market priced trading is gaining importance and is essential for European traders and the competitiveness of the European industry.

Source: IEA, Developing a Natural Gas Trading Hub in Asia, 2013
Not a single EU gas market – but further integration brings benefits

Differences cannot be explained by contract volumes, but by import dependence and lack of supply diversity in the EU member states.

EU member states still pay different gas prices for the same source of gas.

Source: Russia behind the headlines, 5.2.2013, „Gazprom expects price drop for Europe in 2013“ and Ivestija

Further integration of the European gas markets could generate a benefit from price effects between 20-30 billion Euro/year for the EU27 (in the integrated market, no congestion, no real price differences).
Europe is losing out to US

Industry is at a competitive disadvantage ...the gap is getting wider and gas intensive industry will migrate

Residential consumers are also suffering

Declining demand may strand infrastructure - increasing the price of gas further
Vision for the GTM* in a nutshell

- Liquid hubs with sufficient and efficiently used infrastructure
- Functioning markets in all of Europe
- Ensure that gas flows to Europe

*As developed by CEER in 2011

Zones drawn for illustration. Size of zones will depend on CBA.
## Criteria for competition

<table>
<thead>
<tr>
<th>Measure</th>
<th>GTM* criteria</th>
<th>Status quo</th>
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</thead>
<tbody>
<tr>
<td>Infrastructure RSI</td>
<td>RSI &gt; 110% for more than 95% of the days</td>
<td>Not yet assessed</td>
</tr>
<tr>
<td>Size of Entry-Exit zones</td>
<td>≥ 20 BCM (215 TWh)</td>
<td>Only 6 national markets ≥ 20 bcm demand</td>
</tr>
<tr>
<td>Pluralism of sources of supply</td>
<td>≥ 3 significant sources</td>
<td>Importing entities &lt; 3 in Baltic States, FI and SE</td>
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<td>Market concentration</td>
<td>HHI &lt; 2000</td>
<td>Problematic in most markets (except for UK and DE)</td>
</tr>
<tr>
<td>Liquidity of the market</td>
<td>Churn rates &gt; 8</td>
<td>Only TTF and NBP achieve churn &gt; 8 (ZEE close to 8)</td>
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</tbody>
</table>

*GTM criteria generally not met*

Challenges arise in three areas

1. Competitive and integrated wholesale market
2. Retail Competition
3. Contribution of gas to a sustainable energy mix
Short term gas

- Major use of gas will be power production, less concerning volumes but more and more with flexibility
  
  - Flexibility markets (commodity and transport) become more important
  - National flexibility might not be sufficient
  - Market integration, appropriate contractual arrangements and trading facilities necessary

Power vs. coal vs. gas

- Present situation might trigger investment in “wrong“ technology (not flexible enough, high investment cost,…)
- Target models of electricity and gas not optimally coordinated
- Cross-border ancillary services markets need cross-border flexibility markets in gas
- Variability in gas will be more important than in the past
- Although the gas system can easily accommodate for variable needs, demand side participation will be important
Integrating market zones

Integration of market zones

- GTM aims at integrating market zones (also cross-border) on basis of individual decisions by TSOs
- However, incentives for TSOs not to merge market zones dominate
  - risk that higher internal congestion costs are not reflected in allowed tariffs
- Measures to promote integration
  - Within regulatory framework;
  - legal obligation to cooperate;
  - Forcing integration (last resort)

Experience from Germany

- Pressure from BNetzA to conduct abuse cases against TSOs that were not willing to merge market zones
  - Reduction of initially 19 market zones (2006) to only 2 lead to significant increase in liquidity

GTM: Also cross-border market zones and regional trading zones possible but more guidance/rules needed

… may need more central direction
Retail competition

Competitive and functioning wholesale market is a pre-requisite for functioning retail competition

→ Possible if above mentioned measures are introduced and 3rd Package fully implemented

Market arrangements (technical barriers) blocking entry to retail markets?

Retail competition

Market structure

Regulatory framework

… to be achieved through competitive wholesale markets
Gas plants are link between sectors

- Fulfil EU environmental policy goals - Integration of intermitted RES-E sources
- Acknowledging the importance of natural gas for future power supply - Provide flexibility for generation
- Need for clear proposals given complementarity of gas and power

GTM* aware of trend

Neighbouring power TSOs

Power TSOs

Power networks

Trade notifications + (re)nominations

Gas TSO

Gas networks

Trade notifications + (re)nominations

Neighbouring gas TSOs

Gas-fired plant

Untapped potential for improved coordination
Conclusions for Europe

- Sustainable competition between gas producers supplying to Europe is of utmost importance for the future role of gas in European economy

- Essential conditions:
  - Improving flexibility in infrastructure
    - Access to LNG essential for supply diversification
    - Storage as the main flexibility tool
  - Leaving the door open for shale gas production in Europe
    - Cutting gas costs for industry
  - Promote market integration based on hub pricing

Ensuring that the European gas market will remain an attractive market for global market players
Next steps

ACER review and update of the Gas Target Model (by July 2014)

• Taking into account the changes in market dynamics, in system requirements and in the legal framework (including the experience of early NC implementation and experience of GTM implementation projects)

• Including infrastructure component (existing and new infrastructure)

• In close cooperation with stakeholders
  – 1st Workshop on 8 October 2013 in Vienna
  – See: www.acer.europa.eu
Thank you for your attention!