Achieving Gas Supply Security in Europe

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Main messages

• Over-dependence on Russia is not an issue for the EU as a whole and is unlikely to become one

• But it is a real issue for central and eastern Europe

• A single competitive European market would increase supply security for the whole of Europe – *west and east, Russia-dependent or not*

• Eastern European member states must also invest in gas security – and it need not be extremely expensive
Rising imports, falling dependence

**IMPORTS UP**
Since 1990, EU imports rose from 43% of consumption to 60%

**DEPENDENCE DOWN**
Since 1990, Russian gas went from 65% of EU imports to 39% (28% of consumption to 23%)

Source: BP Statistical Review of World Energy; International Energy Agency
EU demand, Russia’s supply are overestimated

RUSSIAN GROWTH? Can Gazprom deliver Yamal -- or any upstream project?

EUROPEAN GROWTH? Since 2000, long-term rate of demand growth continuously revised down

Source: International Energy Agency; US Energy Information Administration
European LNG Capacity Boom

>75 bcm of new LNG capacity = 60% of total EU imports from Russia

Source: Gas Infrastructure Europe; Company data

Billion cubic meters per year
Interim Conclusions No. 1

• For the EU as a whole, high or rising dependence on Russia is not an issue

• Diversity has been rising for decades and the trend is accelerating

• Expanding LNG regas capacity means more gas and more supply security – increased access to a global, flexible market; ability to compete for spot cargoes

• But “Europe as a whole” is misleading
The three Europes of Russian gas

Central & Eastern Europe – Limited volumes from Russia but high dependence

Italy + Germany = almost 50% of all contracted Russian gas in the EU

Most of Western Europe has limited and declining dependence on Russia

A single competitive gas market would have huge benefits -- move diversity eastward, make Europe more attractive for LNG and increase the system’s resilience to external shocks

**Source:** BP Statistical Review; Eurostat
Integrating Europe

What happens in Western Europe is highly relevant to central and eastern Europe’s gas supply security

France, Belg. & Ger. key to:
- Competition between ‘North-western gas’, ‘south-western gas’, and Russian gas
- ‘Europeanising LNG’

Progress real, if slow
- Increased interconnection
- Merging of trading zones
- Introduction of market-based balancing regimes
Interim Conclusions No. 2

- A single competitive gas market would significantly increase short-term gas supply security – *on top of other benefits*

- Central and eastern Europe would benefit disproportionately

- Yet Europe has failed (so far) to deliver a single market

- Eastern European countries face serious risks of supply disruption – they must implement national supply security policies
Bulgaria could meet 1/3 of its peak consumption (5mcm/d out of 15mcm/d) between 6/01 and 21/01
Bulgaria’s supply curve for gas security (Silve, Noel & Findlater – preliminary results)

15 days disruption every 3 years over 20 years

PV (OPEX + CAPEX) (m€/mcm/day)

Capacity (mcm/day)

Existing UGS Chirens

Reverse flow Greece

Reverse flow Turkey

Romania - Bulgaria

Dual-fuel district heating

Greece - Bulgaria

Dual-fuel electricity

Interrupting chemical industry

UGS withdrawal rate increase

Cons. on 1st January 09

Estimated peak cons.
Conclusion: EU Gas Security Policy

• Progressing towards a single market
  – Lesson No.1 from January 2009 – *we need more liberalisation, not less*
  – Irrespective of whether its reliance on Russian gas will increase or not, Europe is better off with a well-functioning gas market
  – Market transactions – not only intra-E.ON co-ordination – should bring gas from where it is to where it is needed in Europe

• Incentivising investment in supply security
  – Lesson No.2 from January 2009 – *some member states are under-insured against supply disruptions*
  – The EC is working on a new directive on the security of gas supply – if well designed, could be an opportunity to make progress
  – Avoiding over-insurance and under-insurance (as well as over-paying for security) requires country-specific, in-depth research