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Different Dimensions of European Gas Security: short and long term

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OIES* Natural Gas Research Programme

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Natural Gas Security of Supply Framework

ADEQUACY OF RESERVES AND R/P RATIOS	IMPORT DEPENDENCE: source, transit, facility
HOW TO MEET FUTURE DEMAND REQUIREMENTS	PRICE SECURITY (volatility/GECF)
LONG TERM CONTRACTS AND MULTI-BILLION $ INVESTMENTS	CONTINGENCY PLANNING (for emergency events)
CARBON REDUCTION	GEOPOLITICS
	EU LEGISLATION

Short term versus long term (post-2020)

Immediate Security Issues for the 2010s

- Import dependence
- Russian supply and transit
- Diversification: LNG
- Price security: pricing, contracts and "Gas OPEC"

Import Dependence: most cited by EU/politicians/media as the most important gas security issue

- Already a fact of life in most European countries
- Many serious gas security problems created by domestic events

Dependence on external suppliers – especially Russians- is the most important issue

Russia-Ukraine 2009-10

- January 2009: the most serious security incident in the history of the European gas industry
- A commercial dispute about Ukrainian gas debts and prices, or a political dispute about Russian control over Ukraine and Europe?
- April 2010 amendment to 2009 contracts: a political solution to reduce gas prices

The Russia-Ukraine problem has not been "solved" but fears of a repeat of January 2009 have receded

June 21, 2010: another Russia payment and transit "crisis" with Belarus

- 2010: Belarus continues to pay $151/mcm (2009 price) instead of $169 (Q1) and $185 (Q2) prices under the 2007 contract
- June 16: Russian president warns Belarus that supplies will be cut if $190-200m debts not settled within 5 days
- From June 21: daily deliveries progressively cut 15%, 15% and 30%; Belarus cuts all transit gas supply to Europe
- June 23: Belarus says it has paid all outstanding debts; accuses Russia of owing $260m
- June 24: all debts paid; dispute settled, supplies restarted

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Russia-Belarus: European consequences

- Lithuania reported up to 40% fall in gas deliveries but demand is at relatively low levels and it is able to access gas from Latvia
- No reports of problems from Poland or Germany (which are able to access Russian gas from Ukraine)
- Nord and South Stream become increasingly important

Not a significant security event, but keeps the "Russian gas security problem" in the front of European politicians' minds

LNG: Very Useful Diversification Strategy

- Allows access to a variety of sources
- Can also serve as a storage facility
- Allows flexibility in case of uncertain demand

BUT:

- Other countries may be able to bid supplies away by higher prices
- Winter requirements particularly at risk from rich countries

Price security becomes a major issue

The Creation of the Gas Exporting Countries Forum (GECF) aka “Gas OPEC

- First Meeting: Algiers – May 2001
- Second Meeting: Tehran – February 2002
- Third Meeting: Doha – March 2003
- Fourth Meeting: Cairo – March 2004
- Fifth Meeting: Port of Spain – April 2005
- Sixth Meeting: Doha – April 2007
- Seventh Meeting: Moscow – December 2008
- Eighth Meeting: Doha – December 2009
- Ninth meeting: Oran –April 2010

Members: Algeria, Bolivia, Brunei, Egypt, Indonesia, Iran, Libya, Nigeria, Qatar, Russia, Trinidad, UEA, Venezuela [Observers: Norway, Netherlands, Equatorial Guinea]

Security Issues Beyond the 2010s

- Will import dependence/Russia remain the major problem?
- Can the southern corridor be a part of the solution?
- Can unconventional gas be a part of a solution?
- Can gas be considered a central part of a "sustainable" energy future?

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Diversification of Pipeline Gas: "the Southern Corridor"

- there is a more than 30 year history of proposed pipeline projects
- there are several proposed pipeline projects and a number of possible suppliers all of which have large reserves BUT
- analysis of likely availability of gas for Europe leads to pessimistic conclusions before 2020

Even after 2020, large scale (ie 50-100 Bcm/year) of Caspian/Central Asian/Middle East pipeline gas supplies to Europe is currently unrealistic

Unconventional Gas in Europe

- How big are the commercial reserves?
- What is the cost of development?
- What is the lead time of the development?

- Unlikely that the North American business model can be transplanted to Europe
- Likely that the cost base will be higher than US

None of these questions/issues is likely to be resolved within a few years.

What is the Role of Natural Gas in a "Sustainable Energy Future"?

BENEFICIAL?

- **Because lower emissions of most harmful solids and gases than other fossil fuels**

HARMFUL?

- **Because still a fossil fuel**

THIS HAS LIMITED RELEVANCE (for the majority of countries) <u>up to 2020</u> because:

- **No substantial nuclear or coal /CCS is possible which (assuming CO2 limits) =**
- **Demand reduction, renewables and gas**

Until 2020 gas is the "default fossil fuel"?

Natural Gas as a "Transition Fuel"

NICE SLOGAN – BUT WHAT DOES IT (COULD IT) MEAN?

- **gas as a transition to ...what**
- **can/how can gas be part of any transition without decarbonisation?**
- **absence of a decarbonisation strategy for gas could be a threat to its long term future**

This is gas' long term security problem

European Gas Security: summary and conclusions

SHORT TERM:

- **Demonstrate that import dependence is a manageable problem**
- **EU-Russia relations need to find some equilibrium acceptable to both sides – is this Nord Stream and South Stream?**

LONGER TERM:

- **Do not be complacent about gas as an “environmentally friendly” fuel**
- **Understand that if objections to supply disruptions and carbon content are not resolved, gas becomes a sunset fuel in Europe**