



The New Security Environment for European Gas Trade: worsening geopolitics and increasing competition for LNG



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Components of the New Environment

- **Indigenous gas reserves and production**
- **Foreseeable limits on Russian exports**
- **Reduced likelihood of Middle East, Caspian (and possibly North African) pipeline supplies**
- **Limitations of West African LNG**
- **Development of a “Gas-OPEC”**
- **Failure of liberalisation and competition in Continental Europe?**
- **Domestic security issues require as much (more?) attention as international**
- **Atlantic/global competition for LNG supply**
- **Competition from China and India?**



Indigenous European Gas Supplies

Present knowledge of UK, Norwegian, Dutch and other Continental European gas reserves, suggests that indigenous European production will not increase beyond 2010, and are likely to decline after that date; this decline is likely to accelerate after 2015



Russian Supplies to Europe after the Ukraine Crisis of January/February 2006

- Natural gas (and general political) relations between Russia and Europe (and Russia and the US) have entered a period to increasing difficulty
- After the two North European pipelines – bringing Russian export capacity up to 200 Bcm (~160 Bcm in 2005) – a limit on exports will be reached:
 - from the European perspective because of fears of over-dependence (and worsening political relations with Russia)
 - from the Russian perspective because of:
 - *general tightening of Gazprom's supplies*
 - *future profitability of the Russian market may make European exports less attractive*
 - *emphasis on diversification of export markets to North America and Asia using "stranded" gas in the Barents Sea and Eastern Siberia/Far East*



Middle East and North African Gas Exports to 2004-2030 (Bcm)

	TO EUROPE			TOTAL EXPORTS			
	2004	2010	2030	2004	2010	2020	2030
M. East	2	35	117	34	102	185	244
N. Africa	61	83	170	63	86	143	200
TOTAL	63	118	287	97	188	327	444
Major Exporters:				2003	2010	2020	2030
	Qatar	19	78	126	152		
	Algeria	64	76	114	144		
	Iran	-	5	31	57		
	Egypt	-	10	19	28		
	Libya	1	2	13	34		
	Iraq	-	1	7	17		

Source: IEA, WEO 2005, (Reference Scenario)



Possible Middle East and North African Exports to Europe

- **Resources – no problem**
- **Absolute volume increases are optimistic (30-40 years to reach current levels)**
- **Very optimistic share of MENA exports to come to Europe (42-50% of Middle East LNG, 85% of North Africa); North Africa will have pipelines dedicated to Europe**
- **Six countries account for 90% of total exports in 2030; Algeria and Qatar = 70-90% of exports 2010-30**

How realistic are these projections?



Middle East Gas Exports - reality

Middle East countries – especially Iran and Qatar – have substantial gas reserves BUT:

- **Europe will be in competition with Pacific and US markets for Qatari LNG**
- **there is a 30 year history of potential ME pipeline projects – with no results**
- **political problems with Iran have prevented pipeline and LNG trade over the past 30 years; Iran has a very bad contractual track record as a gas supplier eg exports to Turkey**

Large scale (ie 100 Bcm/year) Middle East pipeline gas supplies to Europe currently unrealistic in any time frame



West African LNG

- Nigeria is the potential giant with more than 110 Bcm of exports by the mid-2010s if all projects are realised but: political instability, institutional capacity??
- Other West African exporters (Angola, Equatorial Guinea: much smaller and have similar problems

Nigeria will be a key large scale (eg up to 100 Bcm/year) source of additional gas supply if political instability can be managed



An OPEC for gas? Or for LNG?

- **The Gas Exporting Countries Forum: so far not an “OPEC-type” organisation but a “discussion forum”**
- **Galvanised by objections to EU (and national) liberalization**
- **Currently a chaotic organisation with unstable membership and development prospects**
- **Prime movers are LNG exporters: Algeria, Qatar, Iran, Trinidad, therefore an organisation for LNG exporters is more likely than gas exporters**

Unlikely to be effective for at least a decade especially if high prices continue



Continental European Liberalisation and Competition: an unlikely outcome?

- **Nearly 20 years of negotiations, legislation and regulation have produced results on a spectrum between “unsatisfactory” and “extremely disappointing”**
- **Continental European governments are creating a “Champions League” of utilities this is like to limit the competition/ competitiveness agenda**
- **“security” provides an excuse to defend this model at the expense of liberalisation and competition**

Does liberalisation matter for security? UK versus Continental European views



Gas Security: perceptions versus empirical evidence

- **Widespread assumption that imported gas is less secure than domestic supplies and infrastructure has little empirical basis**
- **The most serious gas security incident in Europe in 2006 was not the Russia-Ukraine crisis:**
 - **the fire at the UK's Rough storage reservoir in April**
 - **Uncertainties in some countries caused by a colder than usual winter**
- **How much gas has ever been stopped by "political instability"?**

Ageing and unreliable infrastructure may become a very important problem



North American Gas and Atlantic Basin LNG

- North American production is declining, can production be stabilised in a high price environment?
- Significant additional indigenous gas is available from Alaska and the Canadian Arctic but lead times – especially for Alaska - are more than a decade; commercial/environmental/regulatory obstacles remain
- LNG will be the principal source of incremental gas until Arctic gas arrives; 130 Bcm of regasification capacity is under construction and proposed

The US will be a major competitor in Atlantic Basin LNG markets for at least a decade



The Pacific Region: a global LNG competitor for Europe?

- **Short term Indonesia supply crisis means that Traditional Pacific buyers – Japan and Korea (possibly Taiwan) will compete for Middle East supplies and for marginal/seasonal cargoes from other Atlantic Basin suppliers**
- **China and India will not dominate Pacific (and certainly not global) LNG trade and will only peripherally compete with Europe for gas. Politics is preventing them from accessing their “natural supplies” through pipes**

Projections of “a global LNG market” are ahead of reality but the TREND is real



Supply/demand cycles over the next decade

- **Shortage cycle likely to end in 2007/08 with arrival of new gas**
- **Surplus cycle likely from 2008-12 (maybe up to 2015) depending on power demand and Atlantic Basin LNG, BUT...**
- **Prices may stay high because of oil linkage and lack of liberalisation and competition**
- **Winters may still see high prices**

Demand impact of high oil/gas prices likely to ensure that 2008-15 is a time of surplus but post-2015 becomes “interesting”



The New Gas Security Environment: worsening geopolitics, increasing LNG competition

- there are significant uncertainties from where Europe will receive substantial additional gas supplies post-2020
- Europe is increasingly obsessed with “unreliable and nasty foreigner” theories of energy security but the real problem is...
- political relationships between Europe and major gas exporters – particularly Russia and the Middle East (except Qatar) – are in decline
- significant competition between Europe and the US for LNG is building in the Atlantic Basin

Domestic and international politics, and geopolitics, will determine all of the crucial outcomes for European gas supplies