

An Irresistible Force and An Immovable Object: The Transition to Hub Pricing in European Long Term Contracts

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Conclusions on Oil Indexed Pricing in Europe: no longer logical or tenable for midstream players

**ECONOMIC LOGIC: traditional netback
market pricing based (largely) on oil
products is no longer logical**

**POSITION OF MIDSTREAM PLAYERS: a
commercial situation where companies such
as E.ON and RWE will make trading loss of
nearly Euros 1Bn in 2011 is untenable**

**Excluding Gazprom (and maybe Sonatrach)
there is reasonable consensus about these
conclusions**

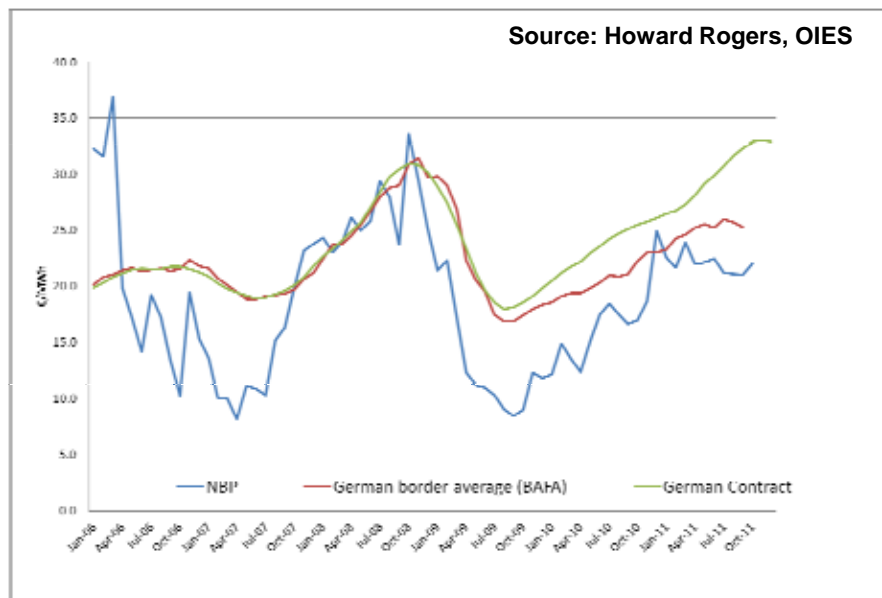
Corporate Structure and Competitive Position of Continental European Buyers

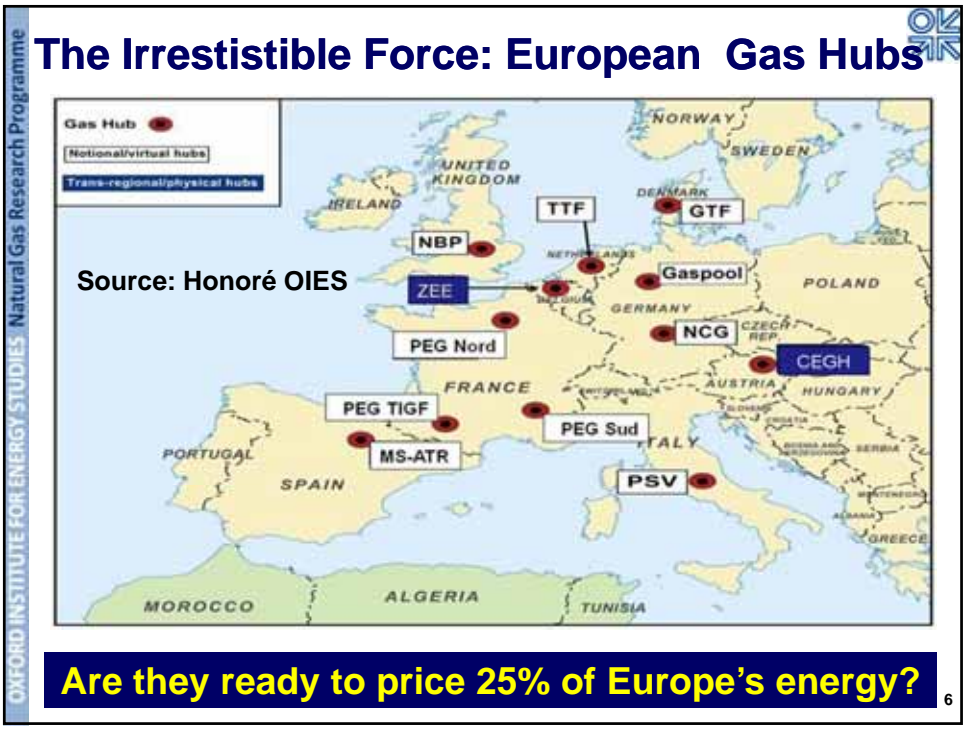
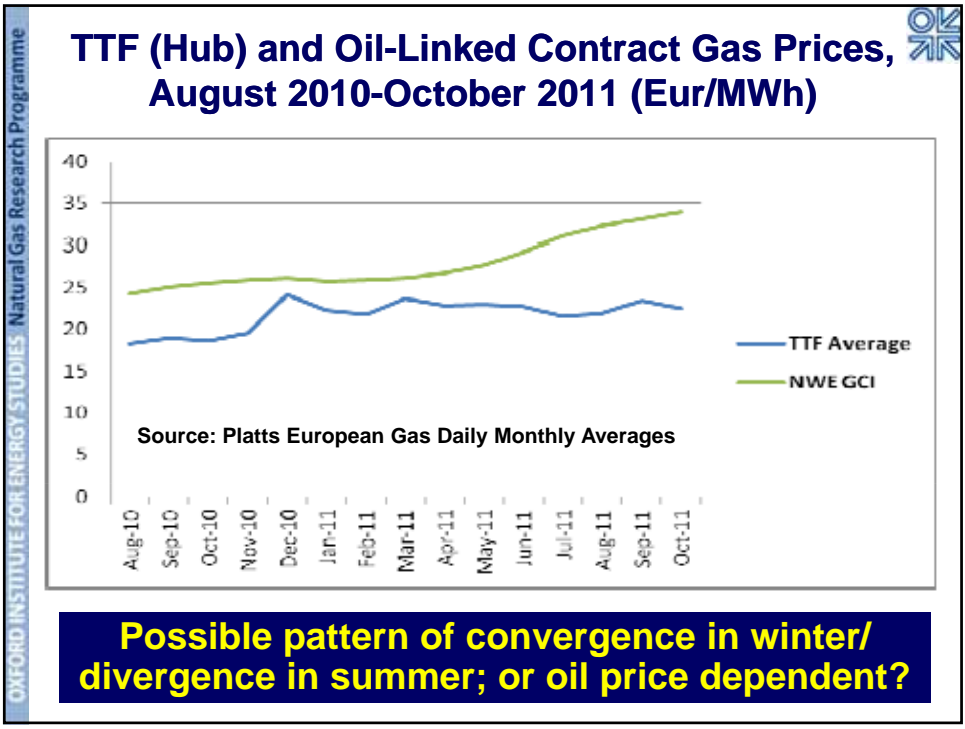


- European gas buyers are no longer “gas companies” they are the gas divisions of power/utility companies
- National/regional monopoly position has been eroded; most are now in an intensifying competitive environment where...
- Automatic pass-through of purchase costs to all customer classes is no longer possible

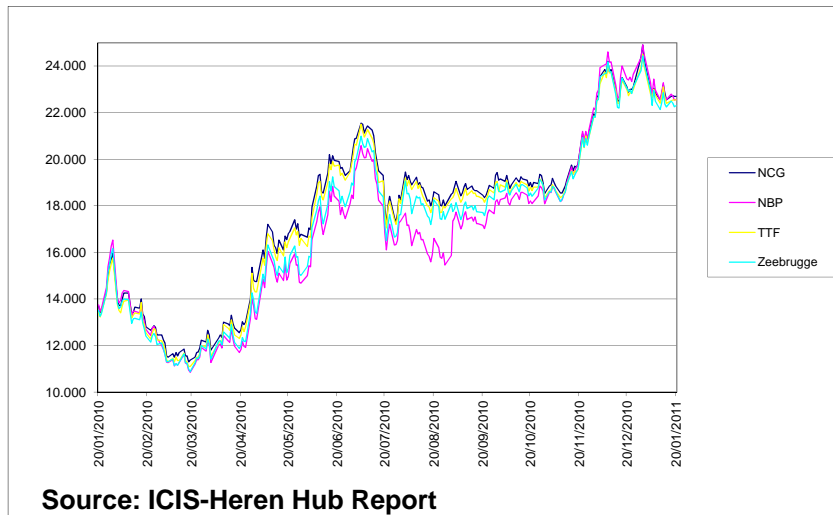
Break-up of old gas structures eg E.ON Ruhrgas is underway

German Oil-Linked Contract Versus NBP Prices: January 2006-October 2011 (Euro/MWh)





Month-Ahead Prices 2010: Zee, NCG, TTF, NBP (Euros/MWh)



Source: ICIS-Heren Hub Report

NBP is the dominant hub, prices well cointegrated across NW Europe despite liquidity and depth issues

The Immovable Object: Gazprom



- Leading the fight against hub prices: most visible, vocal, quotable opponent of changing current system
- Agreed a 15% share of hub pricing in the index (base price?) in 2009-2012 to recognise recession impact
- Seem more willing to change base price than indexation (VNG?)
- In arbitration with many major customers: RWE, E.ON Ruhrgas, PGNiG (and probably others)

Not the only exporter resisting change: Algeria, GECF



Gazprom's position threatens long term contracts

- Maintaining a 2-price system: oil-linked contracts and hubs is not possible; it is a transitional phase
- Move to market pricing (can long term contracts survive in their present form?)
- Hybrid system: European countries which can retain monopoly power can continue to operate on the old system (but for how long?)

Is it possible for existing long term contracts to adopt hub prices? Experience suggests not.



Existing Long Term Contracts: what next?

ARBITRATION/LITIGATION SCENARIO:

- Judgement may mean large financial payout by one side or the other BUT..
- Cannot resolve future pricing issue so..
- Result will be negotiation or termination

NEGOTIATION SCENARIO:

- Negotiation leading to “transitional arrangements” but..
- Value proposition for sellers without oil indexation is questionable

Choice between a painful transition and an untimely end?



Long Term Gas Contract Transition: historical precedents

- North American and UK gas markets moved to market pricing and away from long term contracts in the 1980s and 1990s
- In both cases this was a horribly painful process which took 5-10 years to complete
- Continental Europe is now facing the same changes which could be even more painful because most major sellers operate under a different legal/regulatory framework

11



This Will Create Some New Problems for European Gas Markets

- Greater hub price volatility – already visible on spot markets
- Increase in uncertainty for new investments
- Contractual breakdown threatens security of supply and security of demand

**IF THESE PROBLEMS CANNOT BE RESOLVED
THEN THE FUTURE OF GAS IN EUROPE IS
THREATENED – BUT MANY POLICY MAKERS
DO NOT SEE THIS AS A PROBLEM!**

**These problems will be a big part of the future;
but a return to the “old system” is not an option**

12



GAS AND OIL PRICE RELATIONSHIPS: “RECOUPLING” OR “RECONVERGENCE”?

CONTINUED CONFUSION BETWEEN PRICE FORMATION AND PRICE LEVEL

13



No “recoupling” with oil prices, but possible “reconvergence”

- Prices are likely to increase post 2013 because of tightening due to:
 - declining indigenous production
 - Continued “Arab Spring” impact (Libyan, Egyptian, other? supply)
 - increasing Asian demand post-Fukushima
- But against those trends:
 - New recession/lack of economic recovery
 - Significant US LNG exports starting 2015(?)
 - Reduced demand due to low carbon sources

“Reconvergence” also depends on oil price levels which are driven by different dynamics

14



WILL THE IRRESISTABLE FORCE OVERCOME THE IMMOVABLE OBJECT?

**WE THINK SO, BUT THIS COULD
CREATE SUBSTANTIAL PROBLEMS
FOR EU-RUSSIA POLITICAL
RELATIONSHIPS AND THAT IN TURN
COULD FURTHER DAMAGE THE
IMAGE OF GAS IN EUROPE IE IF
GAS = MORE DEPENDENCE ON
RUSSIA THEN WE DON'T WANT IT**



Thank You

OIES GAS PROGRAMME RESEARCH ON THIS SUBJECT:

**The Transition to Hub-Based Gas Pricing in Continental
Europe,** Jonathan Stern and Howard Rogers, March 2011.

**Continental European Long Term Gas Contracts: is a
transition away from oil product-linked pricing inevitable and
imminent?** Jonathan Stern, September 2009

**Is there a rationale for the continuing link to oil product
prices in Continental European long term gas contracts?**
Jonathan Stern, April 2007