



UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE



EUROPE NEEDS SHALE GAS TO FOSTER COMPETITION

UNECE Gas Centre Industry Forum

Lausanne – 2 October 2012

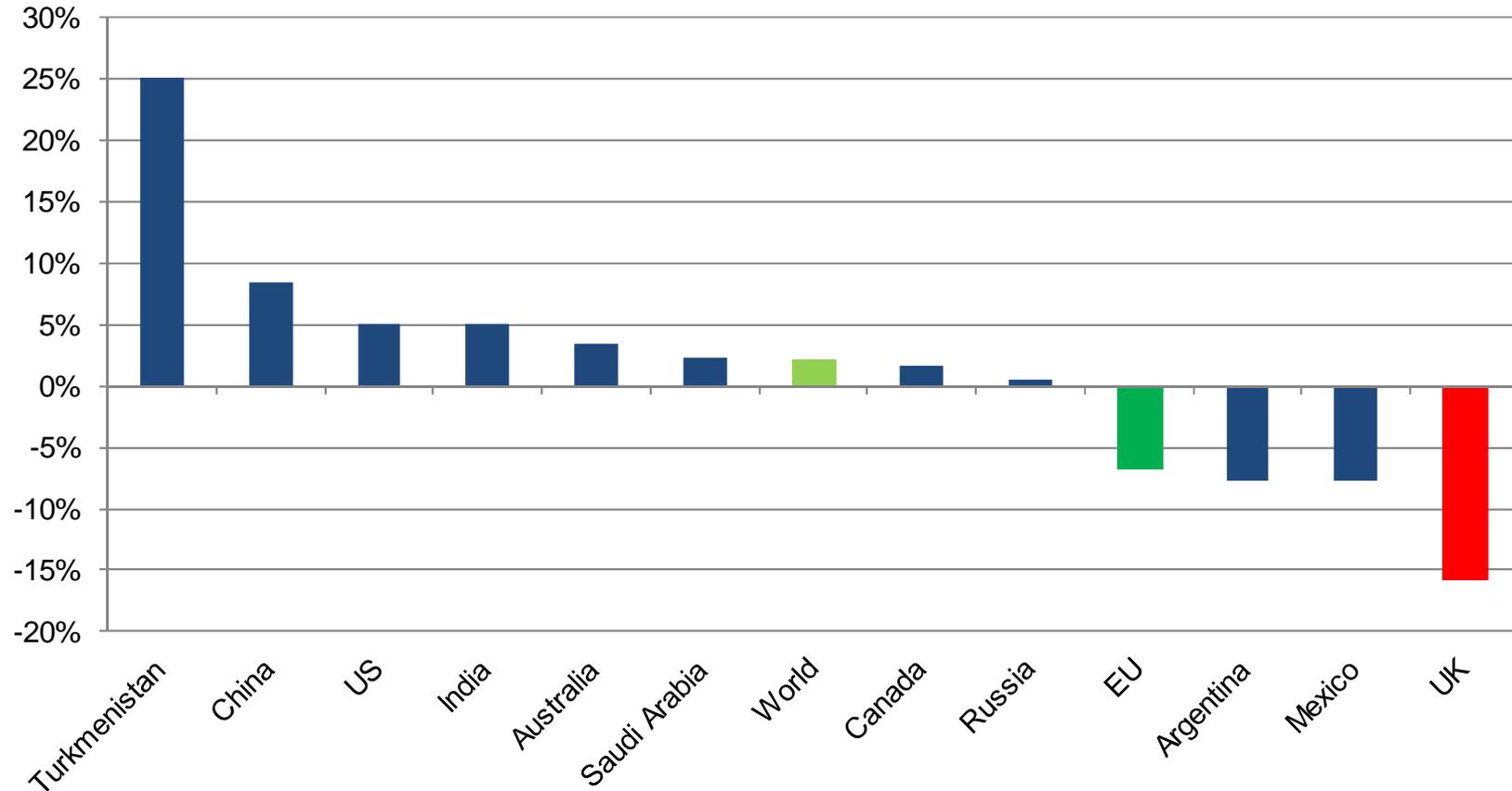
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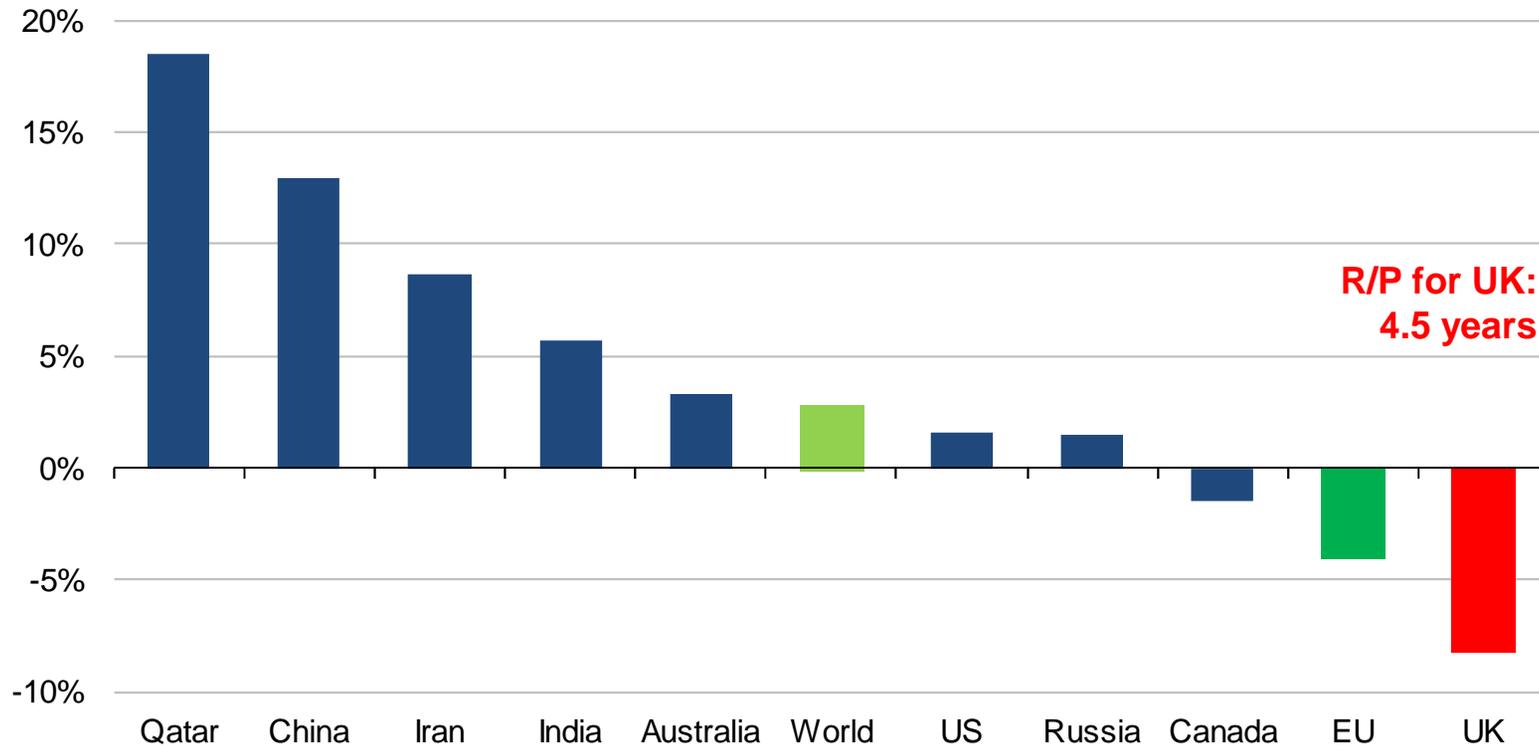
2001-2011 CAGR GAS PROVEN RESERVES IN SELECTED COUNTRIES

A leading indicator of future production



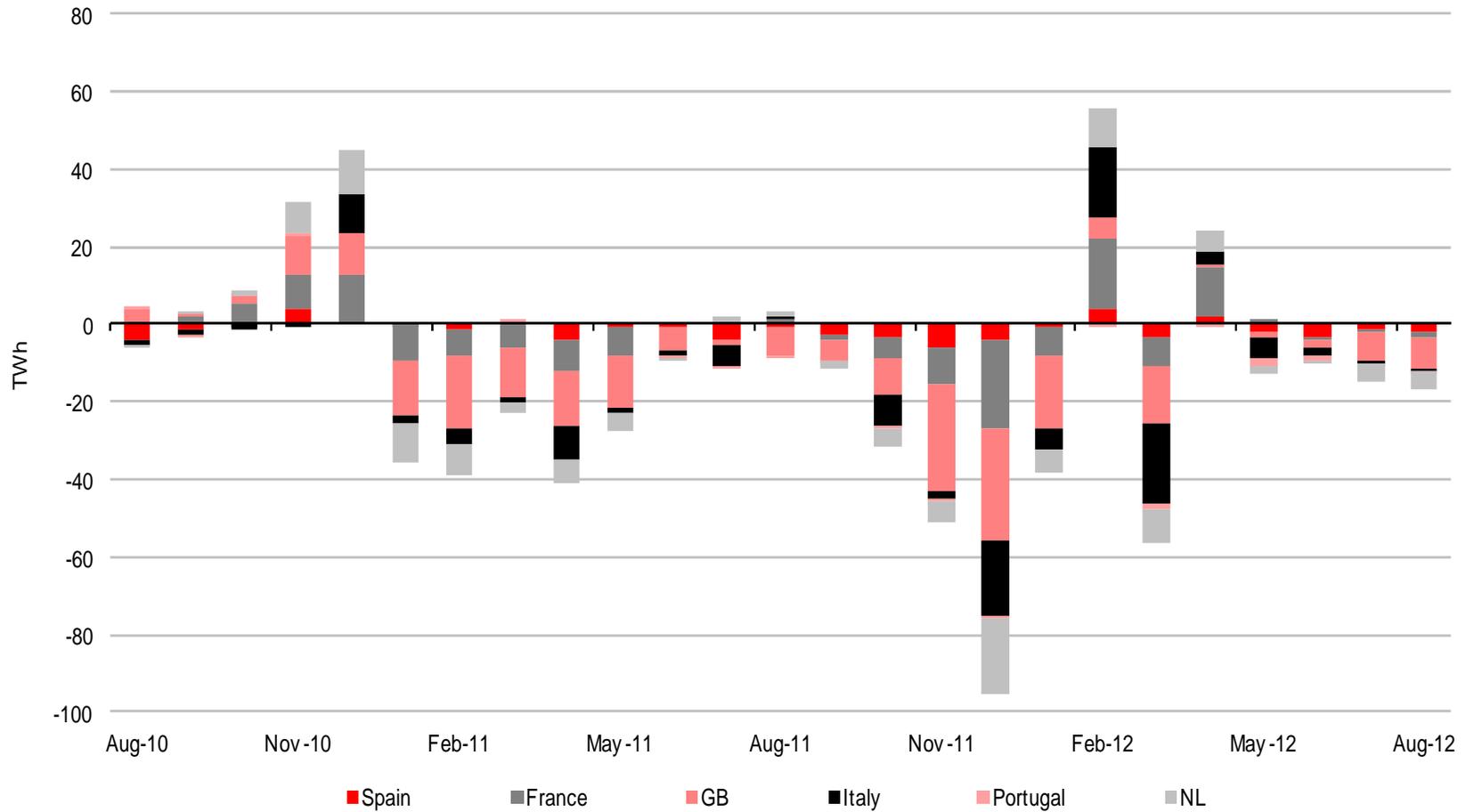
Source: BP Statistical Review, SG Cross Asset Research

2001-2011 CAGR GAS PRODUCTION IN SELECTED COUNTRIES



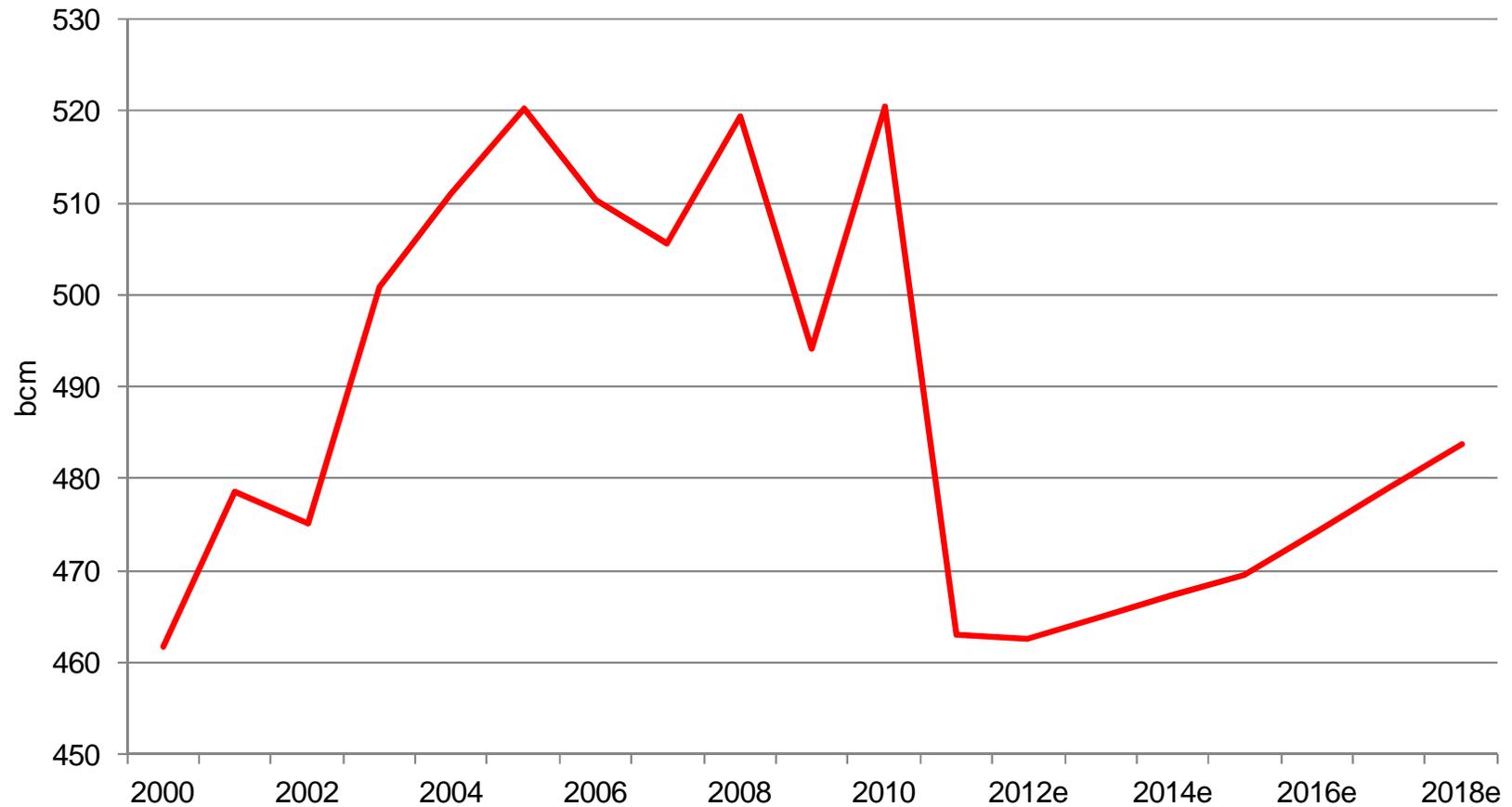
Source: BP Statistical Review, SG Cross Asset Research

SG GAS PULSE: -3.5% IN JAN-AUG 2012 VS JAN-AUG 2011



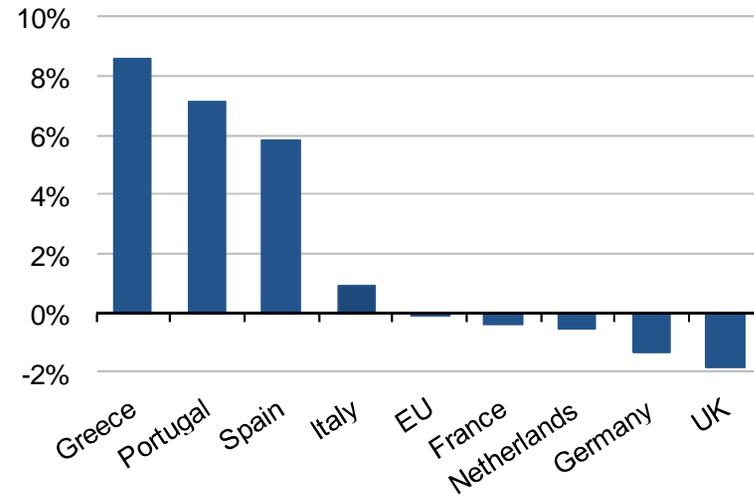
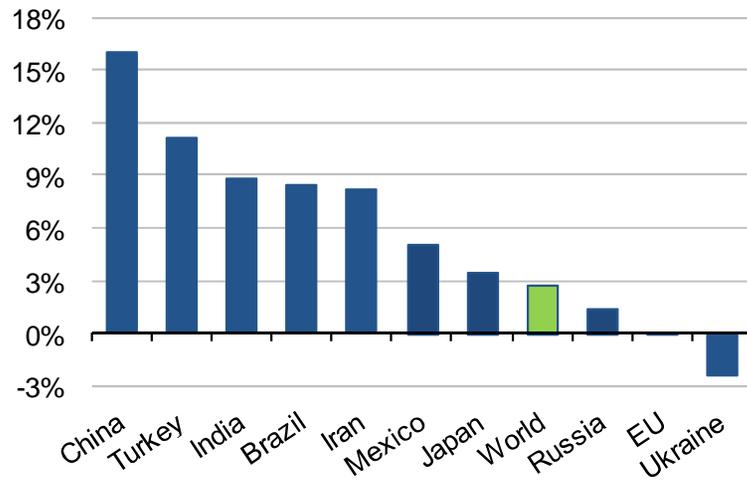
Source: SG Cross Asset Research, GRT Gaz, TIGF, National Grid, Enagas, REN, Snam Rete Gas, GTS Netherlands

TEPID EUROPEAN GAS DEMAND



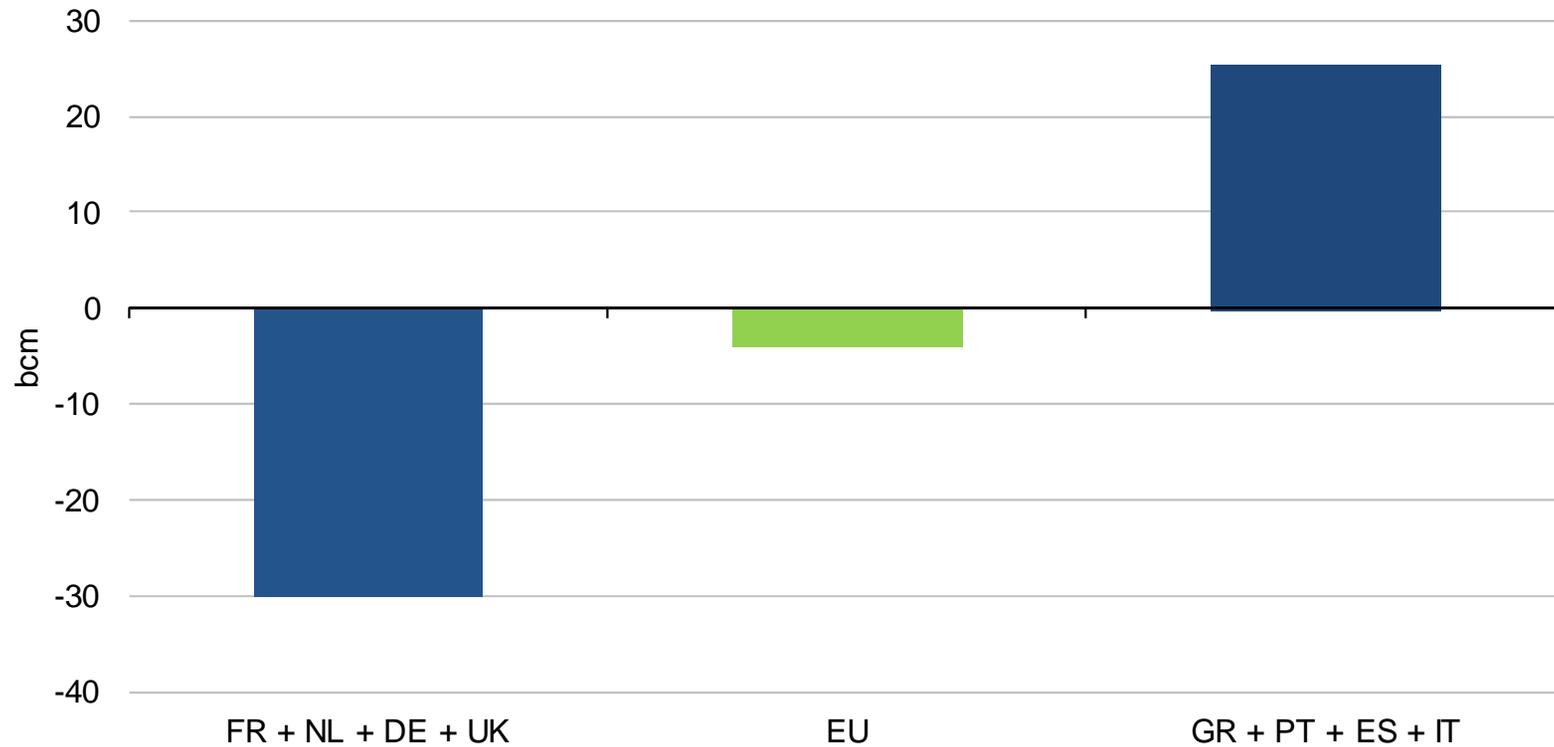
Source: IEA for historical data, SG Cross Asset Research estimates

2001-2011 CAGR GAS DEMAND



Source: BP Statistical Review, SG Cross Asset Research

2001-2011 DROP IN MATURE COUNTRIES WAS NOT MITIGATED



Source: BP Statistical Review, SG Cross Asset Research

GAS VS COAL IN POWER GENERATION

- **Fuel switching in favour of coal, as well as the additional pressure coming from renewable production, could mean a decrease in gas demand for power generation as high as 20 bcm in 2012e for Europe**

- **If gas is to become competitive for power generation, one of the following would need to occur:**
 - Coal prices to move up to 150 \$/t (about +50% vs actual level)
 - Gas prices to move down to 40p/th (about -30% vs actual level)
 - Carbon prices to increase to 30 €/t (at least x4 vs actual level)

GAS

- **In the US, a commodity traded on supply-demand fundamental**
 - 22% of worldwide consumption
 - High liquidity
 - Spot pricing

- **In Europe, analysts need to look at states and company strategies**
 - 14% of worldwide consumption
 - Poor liquidity
 - Relying on hubs for price discovery?

SHALE GAS THE SOLUTION TO ILL-FUNCTIONING EU GAS MARKET?

- Foreign National Oil Companies control c.50% of European supply
- “Gazprom may have imposed unfair prices on its customers by linking the price of gas to oil prices” - EU press release, 4 September 2012 - “Commission opens proceeding against Gazprom”
- The “overpricing” in terms of the European gas bill is \$153bn for 2012e or 0.9% of European GDP!
- Gas demand to remain weak if prices stay high
- **European shale gas the only “new” gas to foster competition**

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