

# External factors shaping the European market

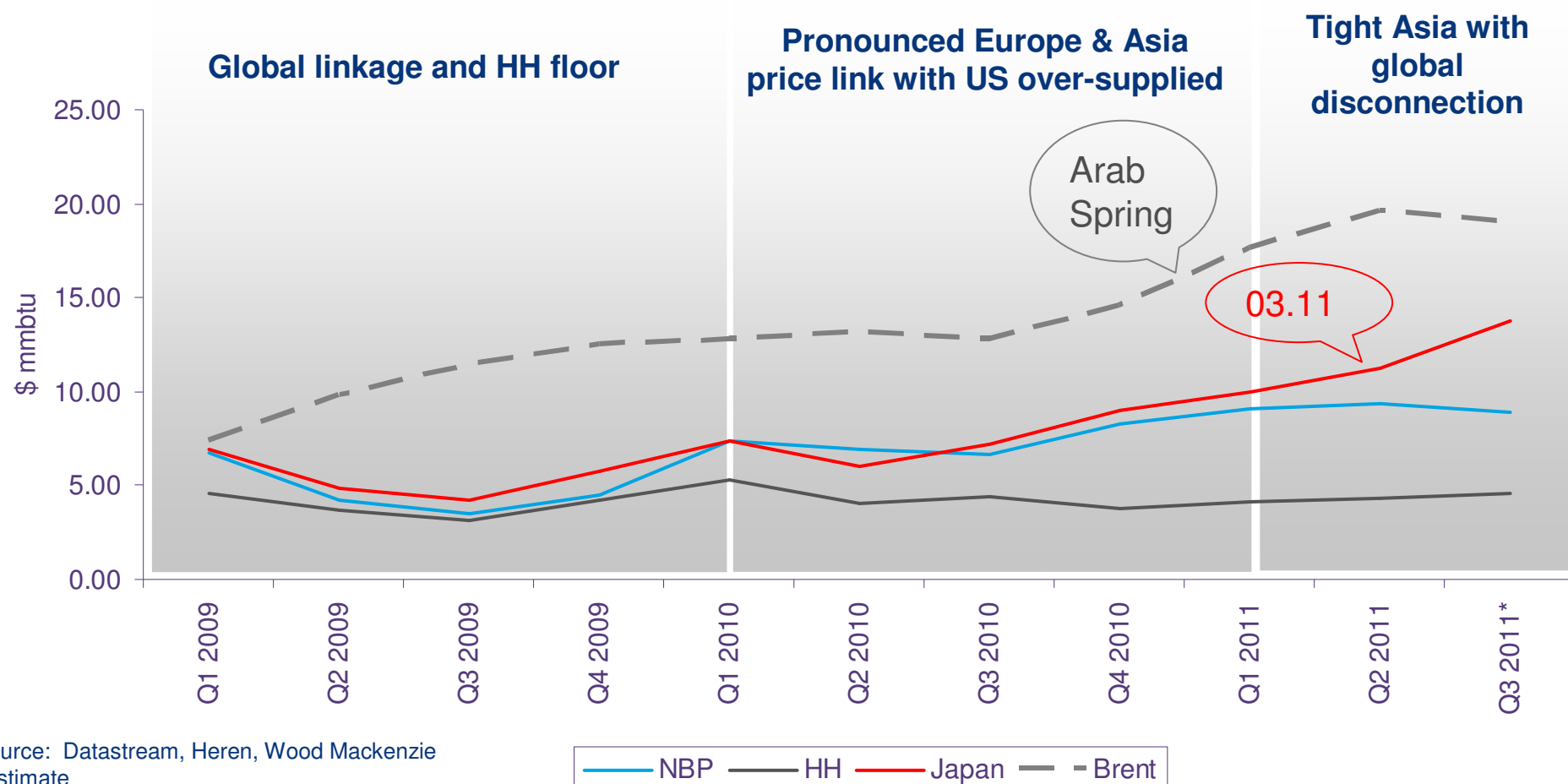
Massimo Di Odoardo – Principal Analyst

## Ofgem Winter Outlook

27 September 2011

# Global spot prices are “disconnected” - with Asia prices close to oil parity

## Global Spot Prices & European Contract Price



## Europe is being influenced by a number of external factors including

### › The “Arab Spring”

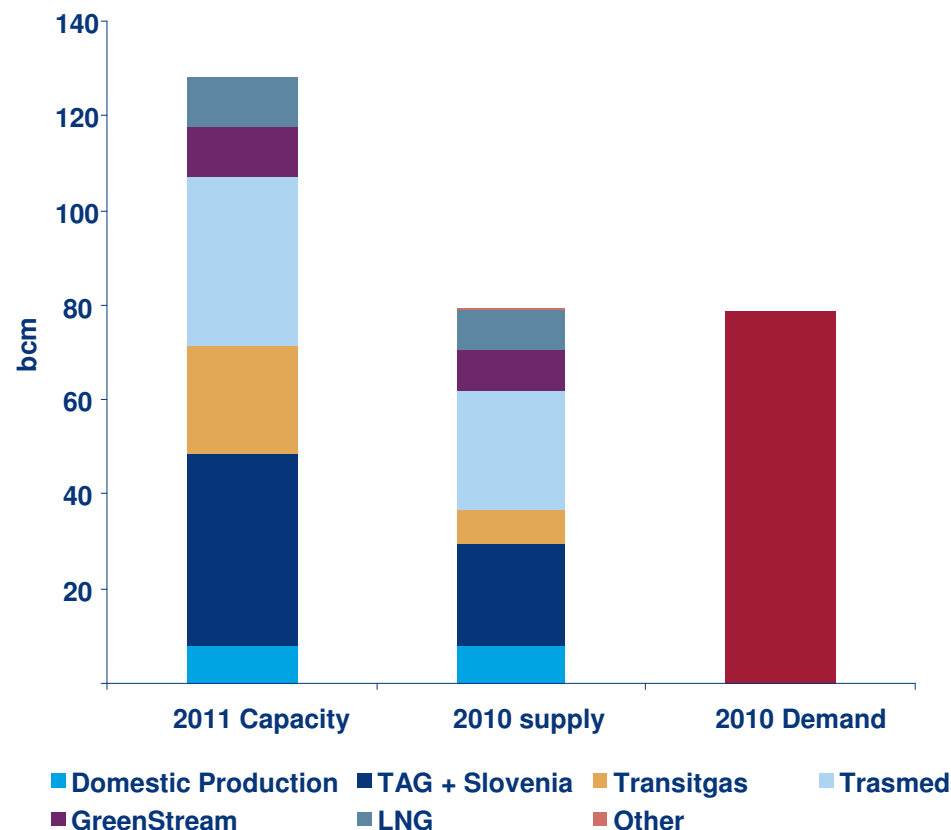
- Libya impact in Italy and Europe
- Other North African and Middle Eastern issues

### › Pacific Basin and LNG dynamics

- Demand in Japan post Fukushima
- Pacific Basin demand and lack of proximate supply
- Qatar behaviour
- Increased shipping rates

The Libyan civil war has removed 10bcm of Italian pipe import capacity but the market is well supplied – production is expected to resume before end of 2011

Italy - available import capacity (2011) and supply/demand (2010)



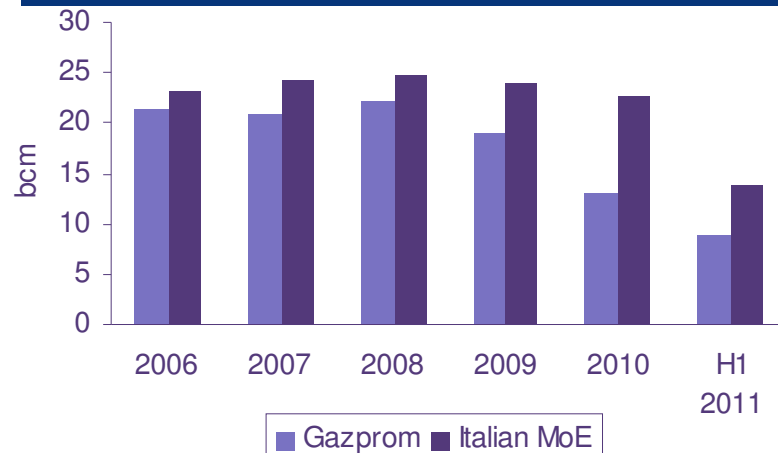
Source: Wood Mackenzie, Italian Ministry of Energy



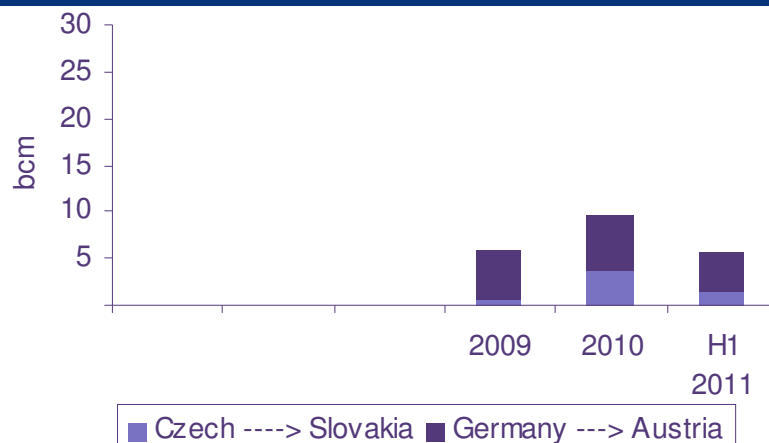


# Is GreenStream resumption going to have an effect on Europe?

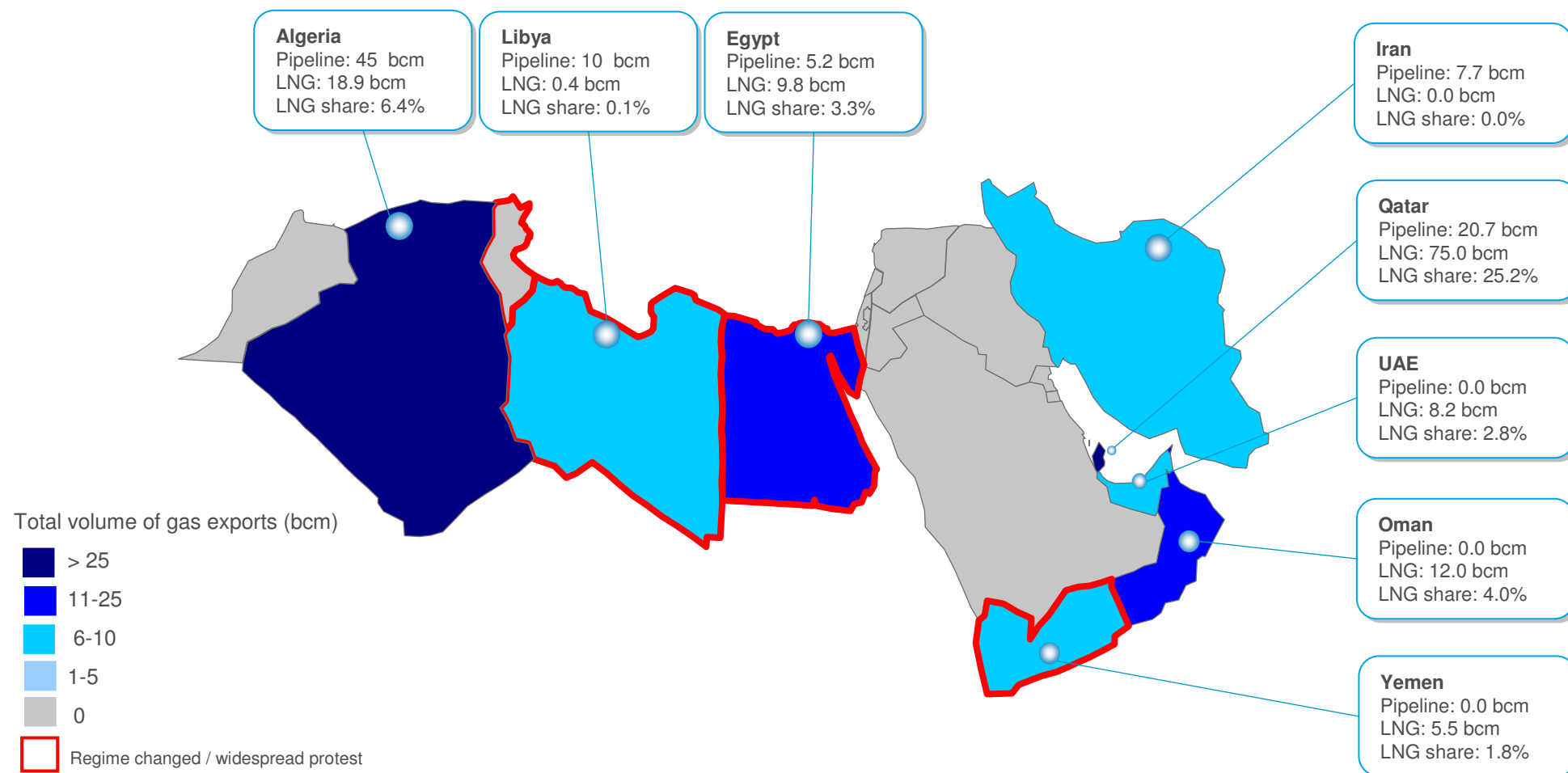
Imports via TAG vs Gazprom sales into Italy



Imports into Slovakia and Austria\*\*\*



## The major effect of the “Arab Spring” on the gas market has been via the increase in the oil price – however there could be additional risks



Wood Mackenzie Global Gas Tool, LNG Tool, 2010 Data

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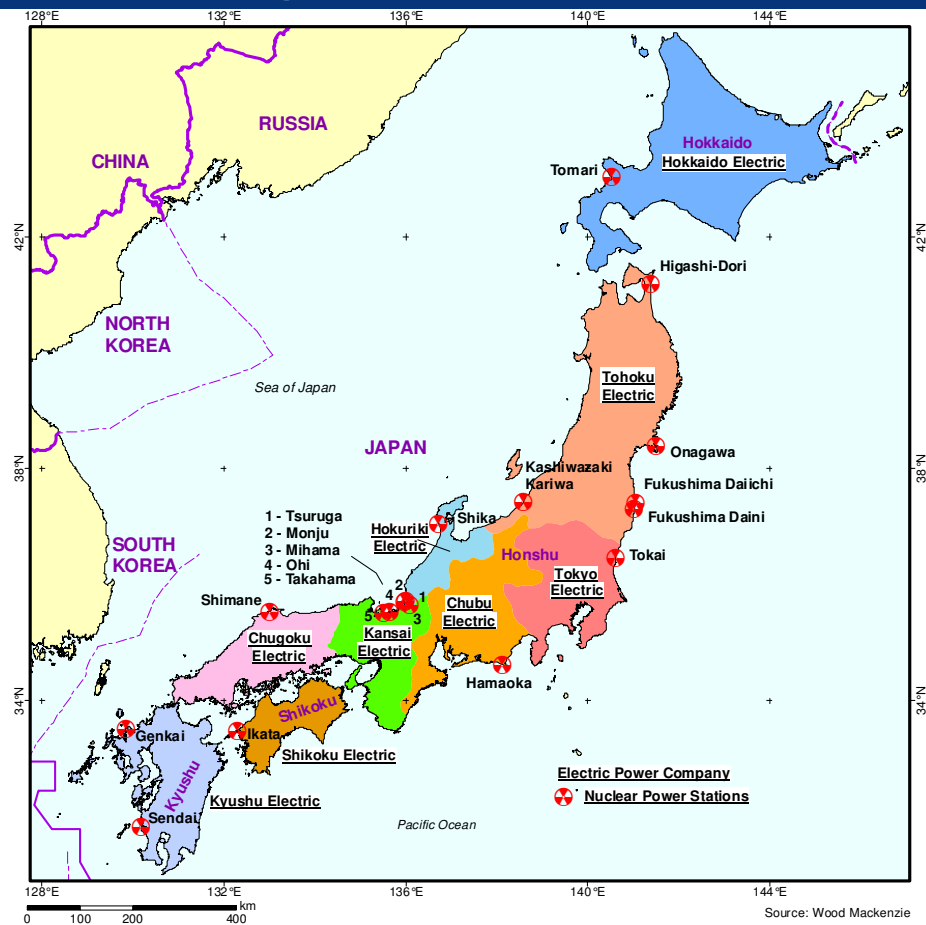
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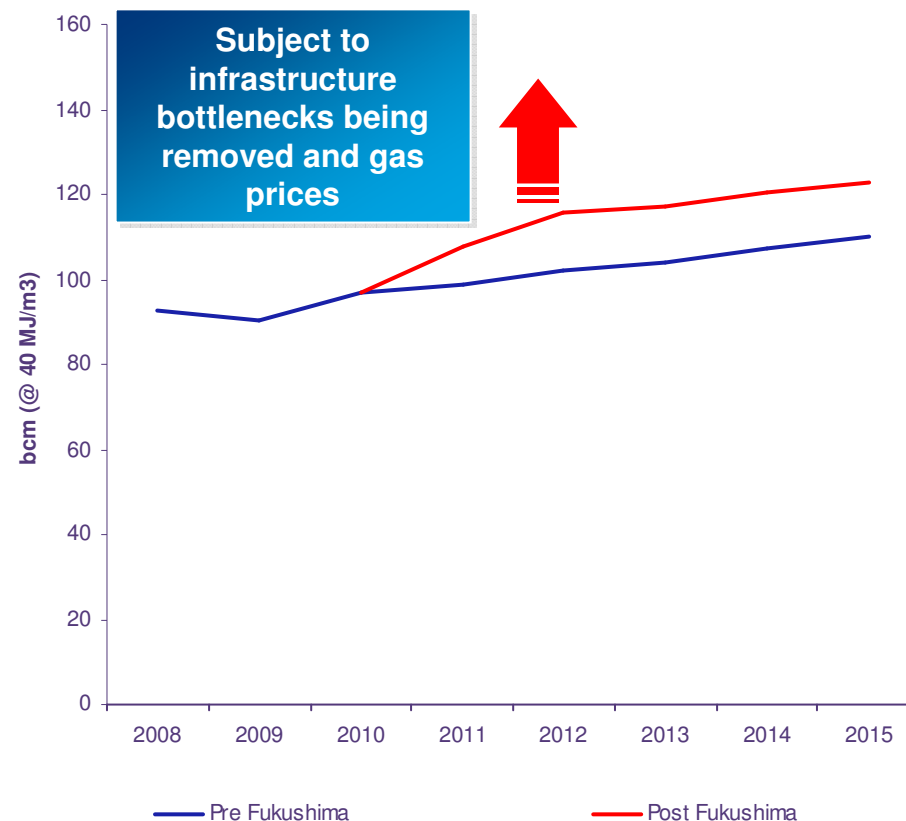
## Ongoing nuclear uncertainty in Japan presents further upside potential – however infrastructure constraints and gas vs oil prices could limit it

### Japan Nuclear Generation



Source: Wood Mackenzie GGS H1 '11, Preliminary H2'11, Estimates

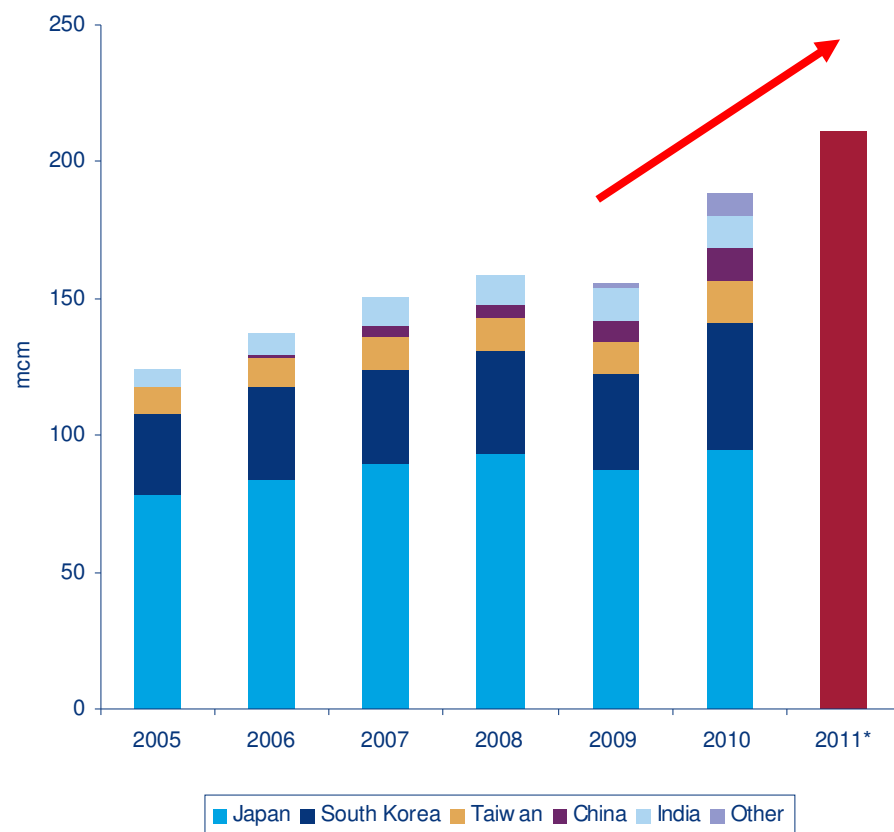
### Japan LNG Demand





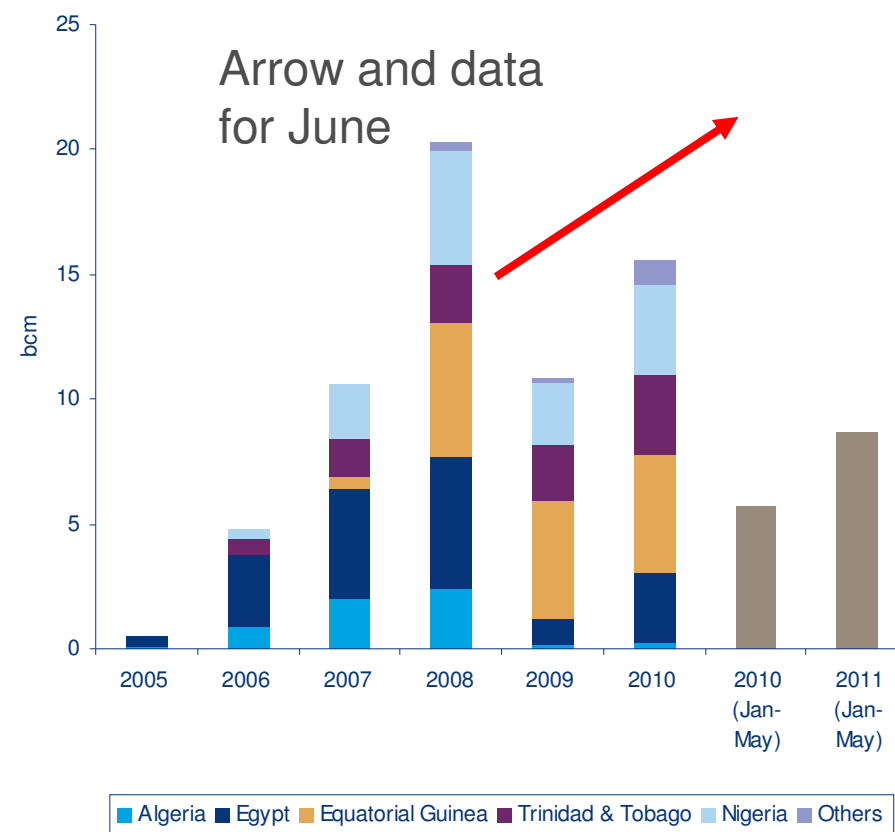
# The Pacific requires increasing quantities of remote LNG to satisfy demand...

## Pacific LNG import by country



Source: Wood Mackenzie

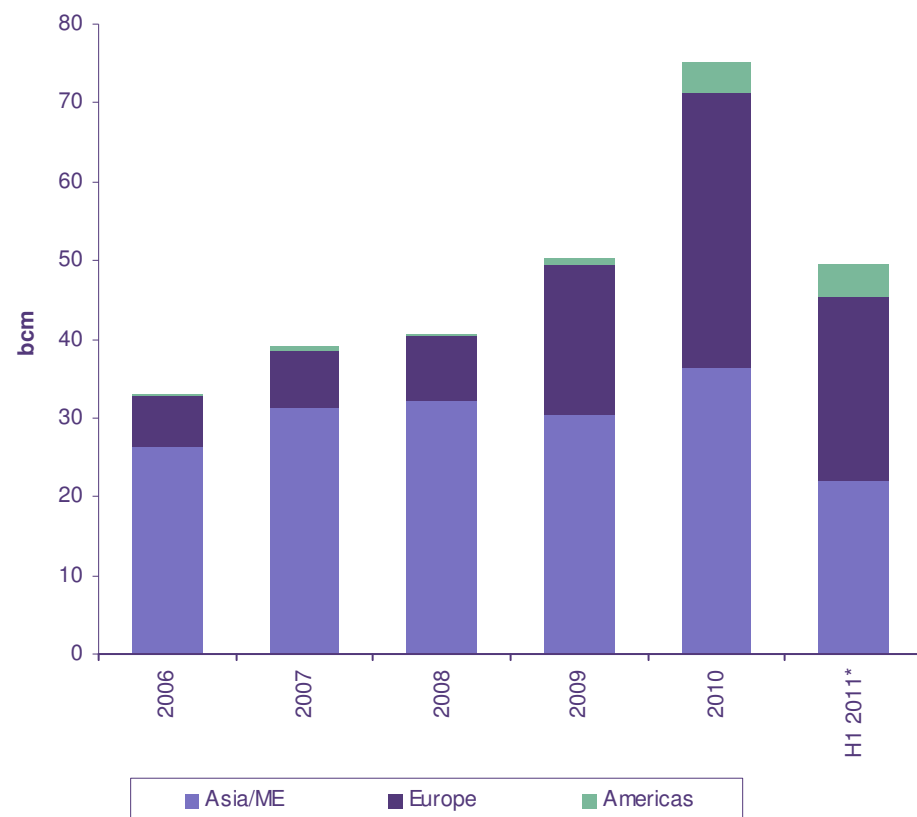
## Atlantic export to Pacific Basin



Source: Wood Mackenzie

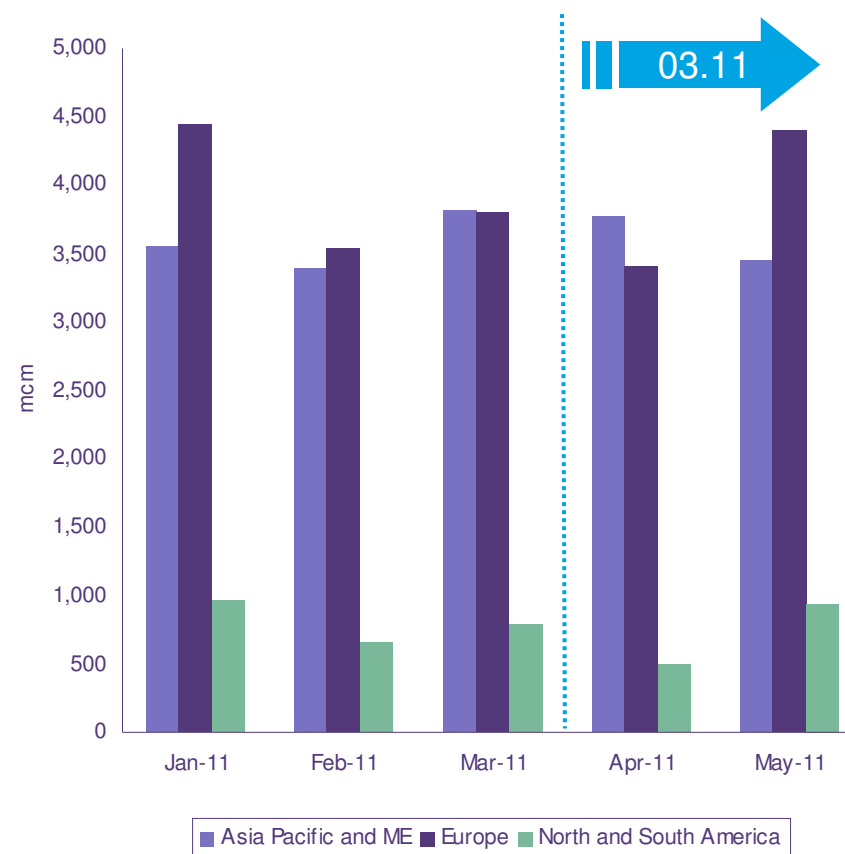
## ...while Qatar LNG exports to NW Europe are increasing much faster than that into the Pacific

**Qatar LNG export by region (annual)**



Source: Wood Mackenzie

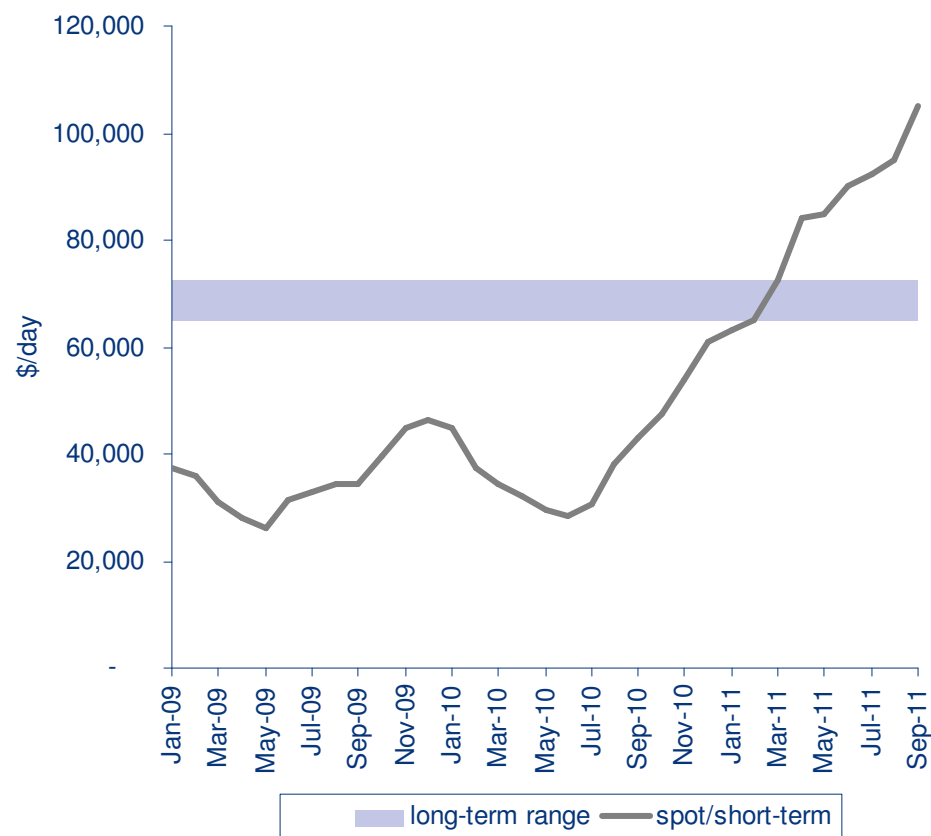
**Qatar LNG export by region (2011 monthly)**



Source: Wood Mackenzie

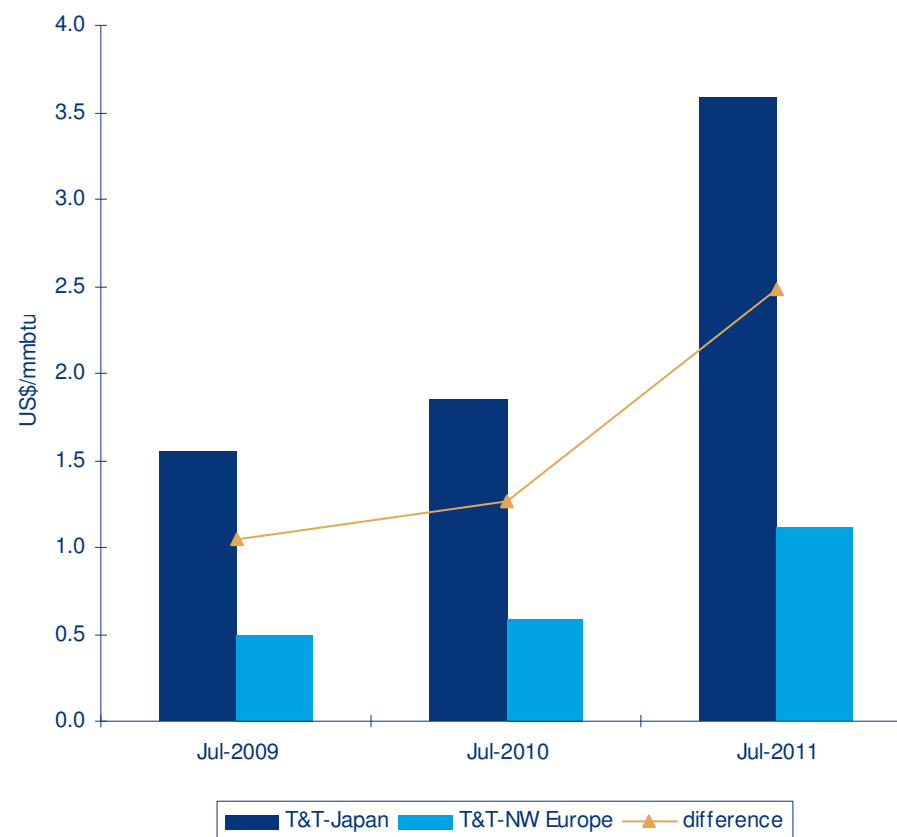
# Rising charter rates for LNG ships reflects sub-optimal LNG shipping flows

## Spot/short term chart rates vs long term range



Source: Wood Mackenzie

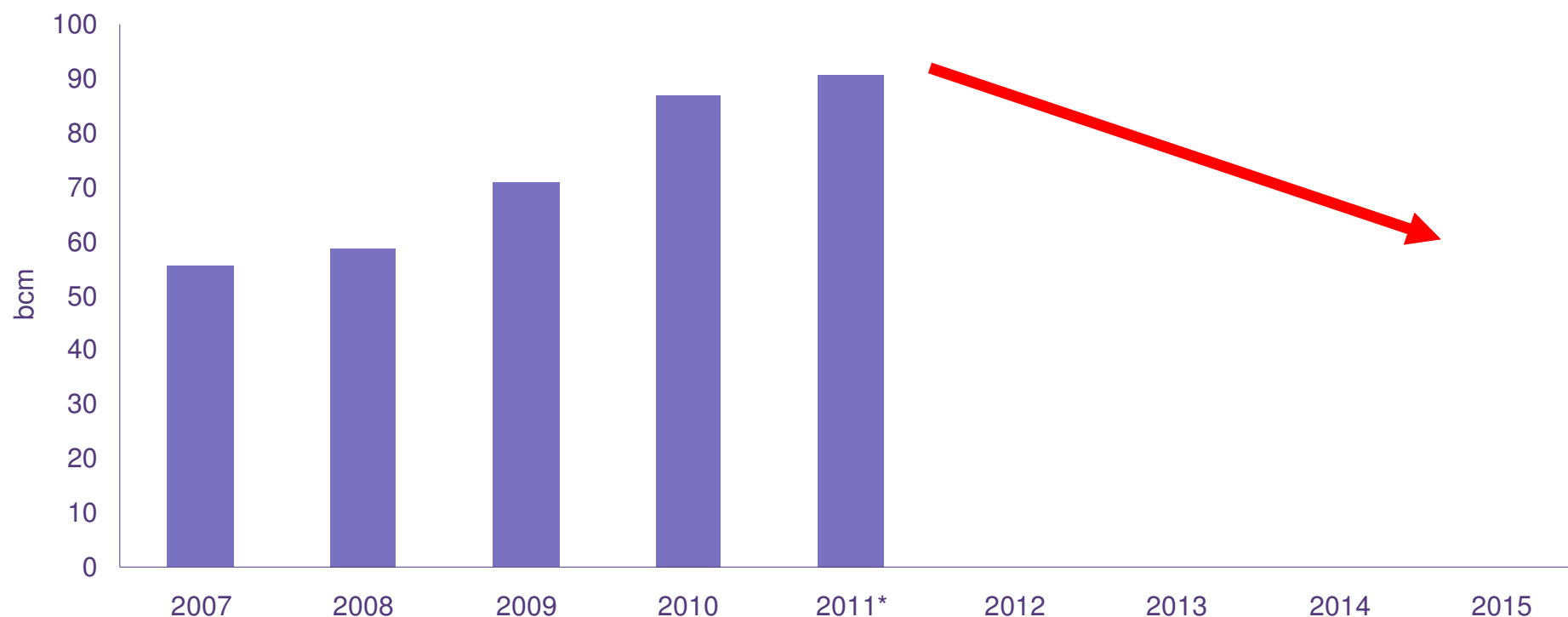
## LNG shipping differential between NW Europe and Japan - from T&T



Source: Wood Mackenzie

## Europe's over-supply will be relieved by the inevitable decline in overall LNG imports, as LNG is drawn to higher priced markets in Asia Pacific

### Europe LNG Imports



Source: Wood Mackenzie

\*Estimate

## Conclusions

- › **As Europe becomes increasingly import dependent it is increasingly subject to external shocks**
- › **The major effect of the “Arab Spring” on the gas market has been via the increase in the oil price – however there could be additional risks**
- › **Growing demand in the Pacific will reduce the increasing LNG availability that Europe has counted upon in the last few years**
- › **Prices in Europe are expected to increase to oil-indexed levels – with upside risks along temporary imbalances**

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