



## A possible outlook for the European gas market

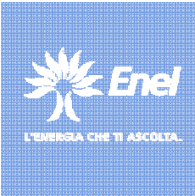
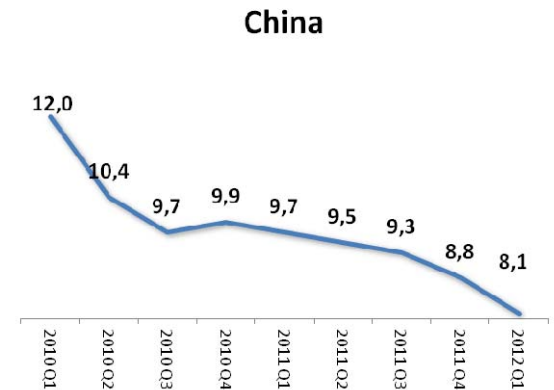
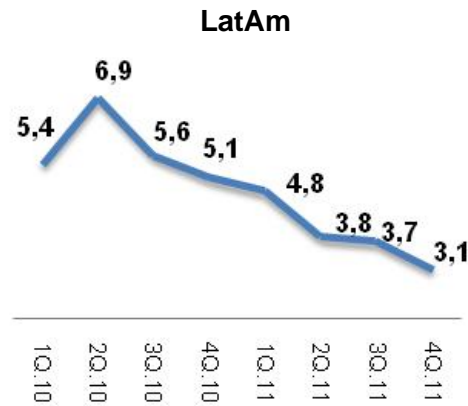
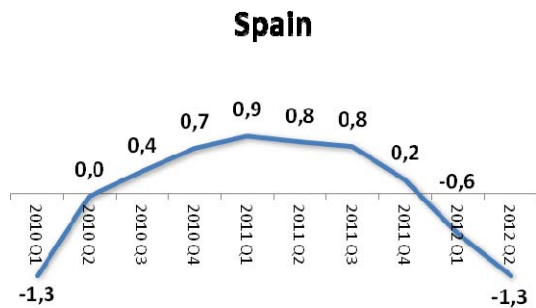
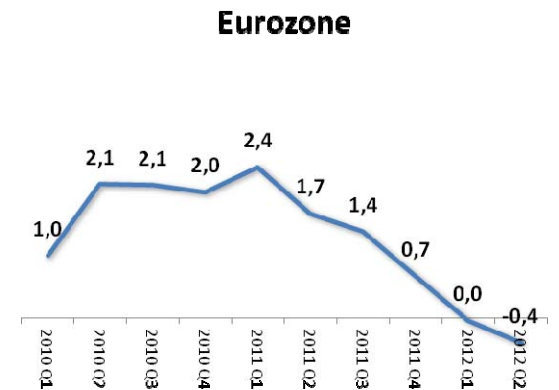
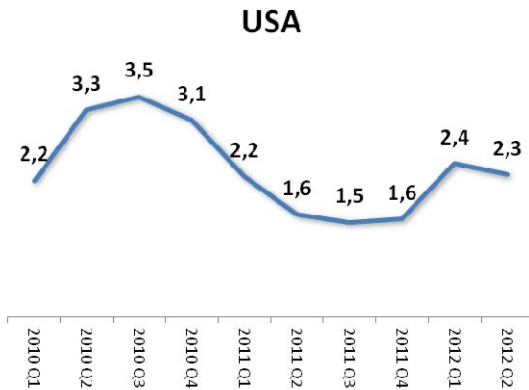
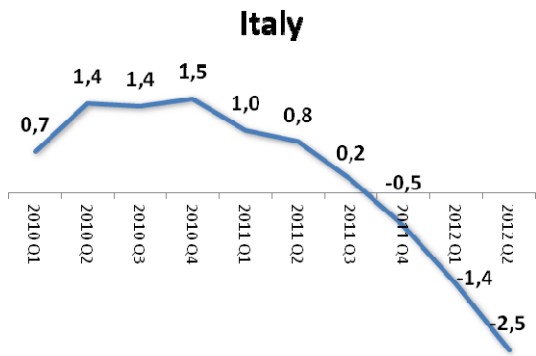
21 September 2012



# Economic slowdown...

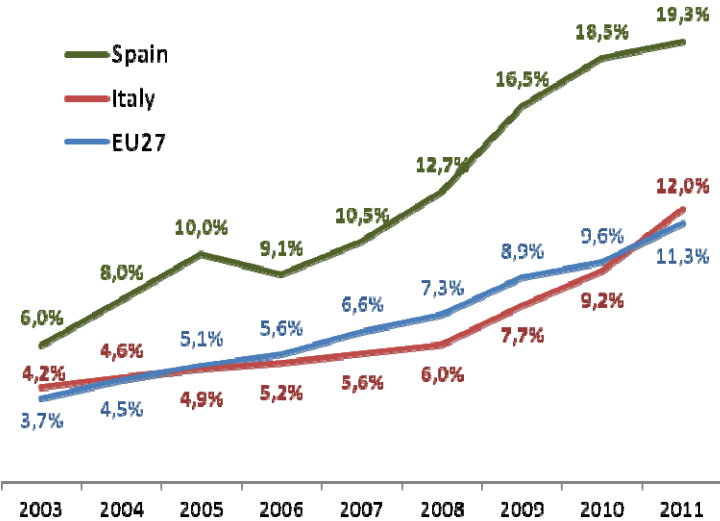
## GDP

(% yoy)

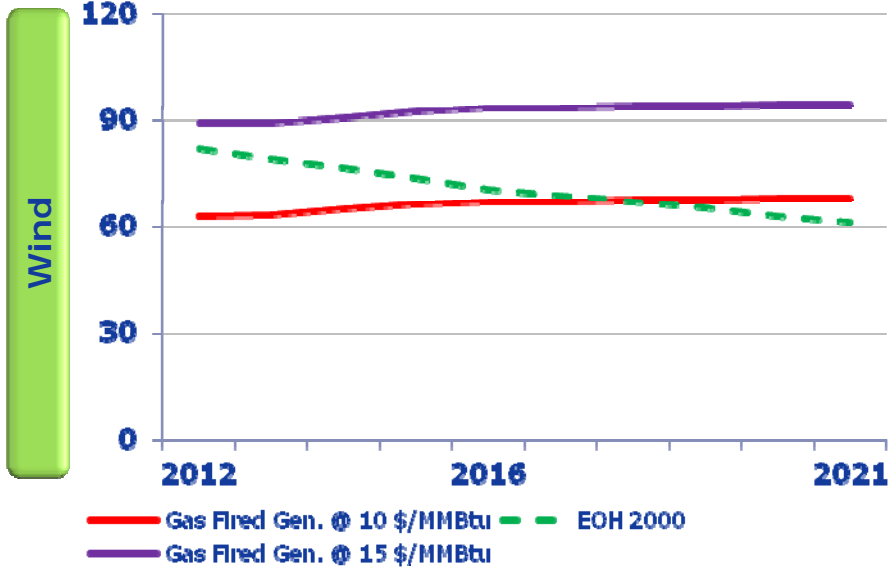


# ... and renewables growth...

Market share of renewable energy (\*)



Italy (2.000 EOH - €/MWh)



(\*) Energy produced by wind and solar, excluding Hydro



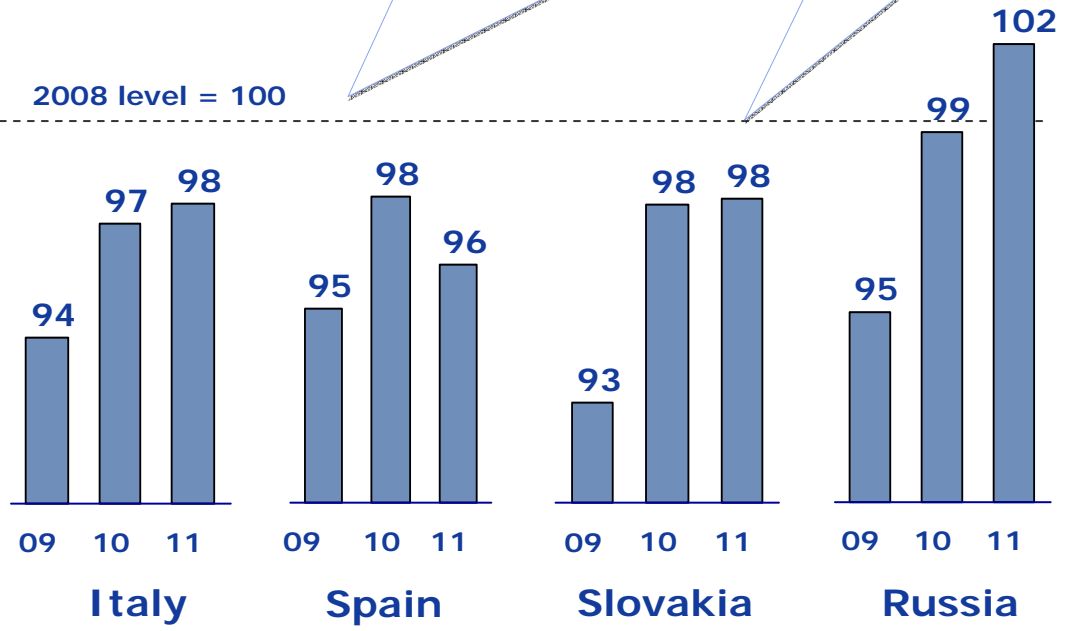
# ... lead to flat demand and lower prices across Europe...

	2013		2020	
Scenario	new	old	new	old
Italy	328	343	364	382
		-5%		-5%
Spain	248	269	290	318
		-8%		-9%

Last 12 months	
Coal	-22%
Gas Zeebr.	-6%
Power D	-16%
Power I, E	-4%

Electricity demand  
(N.I. 2008=100)



# ... while demand is uncertain also in other markets

## European gas demand

- Lower energy needs as a consequence of the European crisis and energy efficiency
- Shrinking thermal power demand caused by rising role of renewables

## North American shale gas revolution

- Magnitude of US LNG exports
- Volatility of US gas prices in the long term from new sources of demand
- Possible spread of the shale revolution to other regions

## Chinese growth

- Exhaustion of the current Chinese growth model and lack of clear alternative
- Elasticity of Chinese gas demand to gas prices

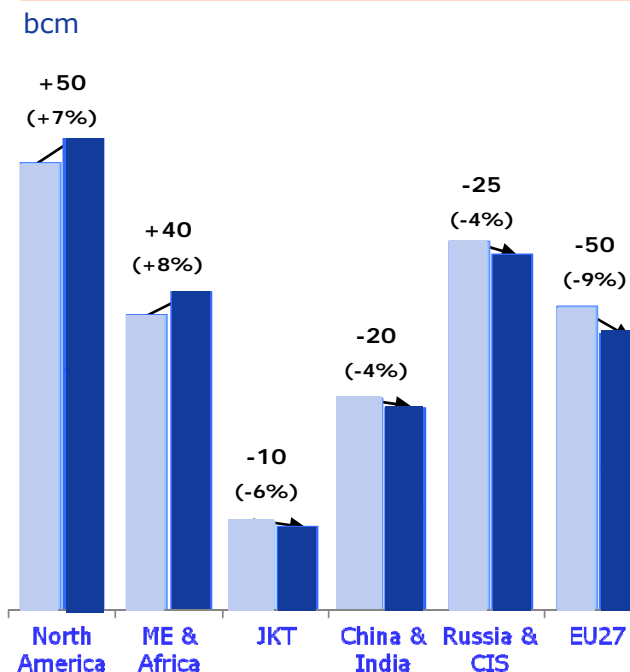
## Overheating of Australia

- Significant cost overruns
- CBM facing low productivity of wells
- Timing of next wave of Australian projects

## Arab spring

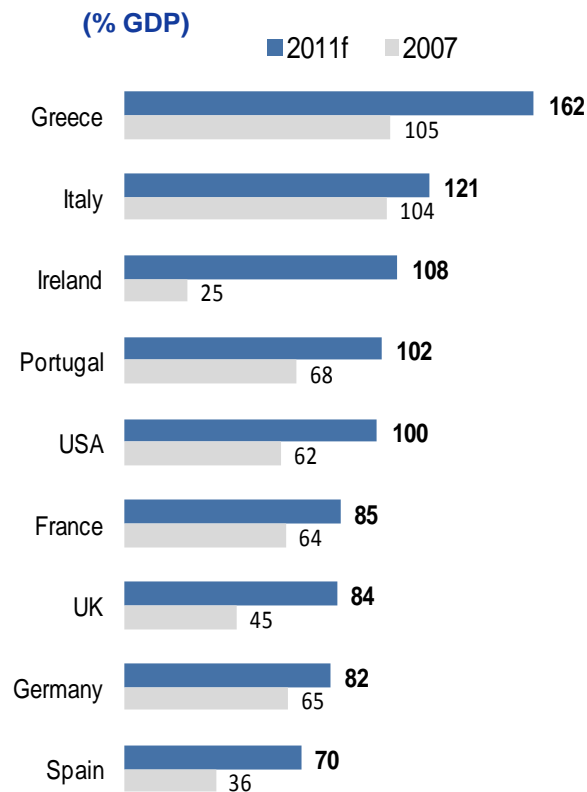
- Rising fuel subsidies driving further increases in ME gas demand
- Some ME countries turning to gas and LNG imports

## World Demand projections (2020)



# As OECD economies deteriorates Government increase taxes and introduce measures to contain energy cost...

Growing government debt



New fiscal and other measures



Reduced interest in new capacity and increased optionality of existing assets



# ... while supporting energy efficiency and domestic resources

## Summary

**Energy efficiency**

- Reduce primary demand by 4% vs 2010, and 24% compared with business as usual




**Renewables**

- Increase from 23 to 38% of share of power generation

**Domestic Gas Market**

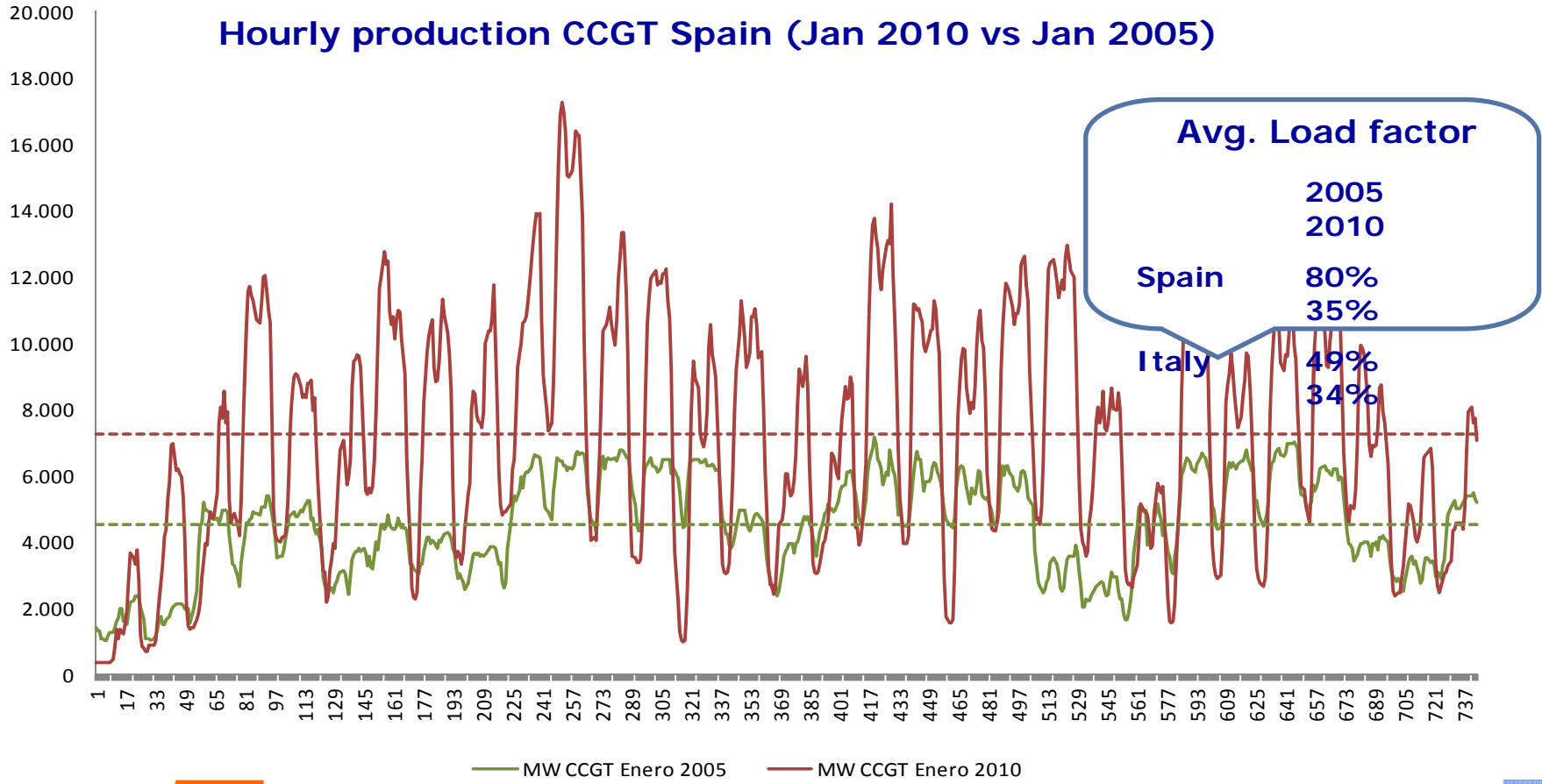
- Develop a liquid gas market
- Increase import infrastructures to increase daily import capacity
- Increase investments in domestic production

## Gas market 2020 vs 2010

- **Demand:**  
 15%
- **Domestic production:**  
 50%
- **Net imports:**  
 25%

**A goal to align energy cost to European levels**

# A new paradigm for gas demand...



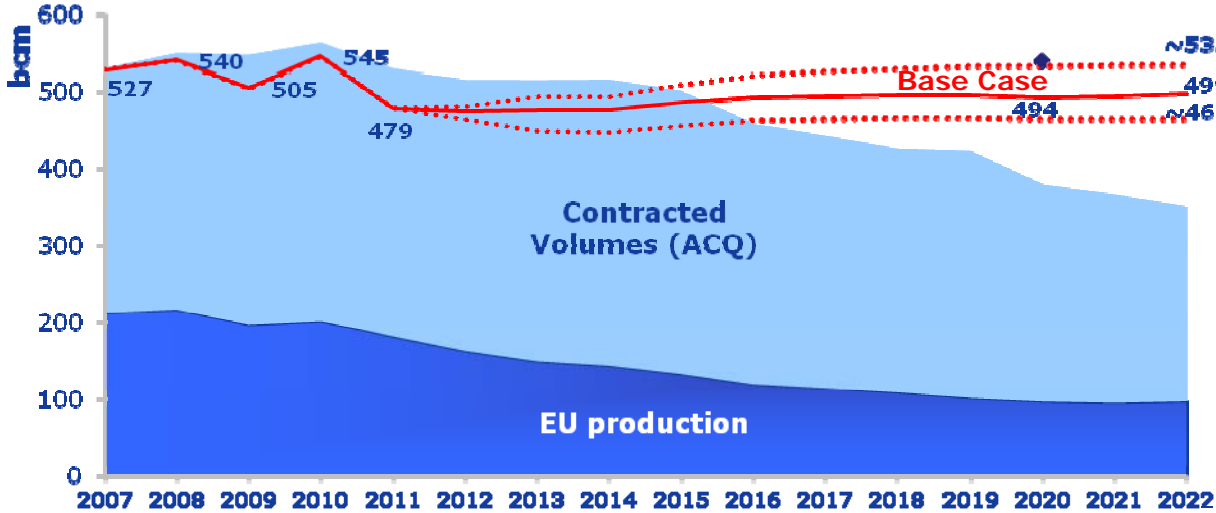
**Greater volatility of operations requires greater flexibility of gas supplies**



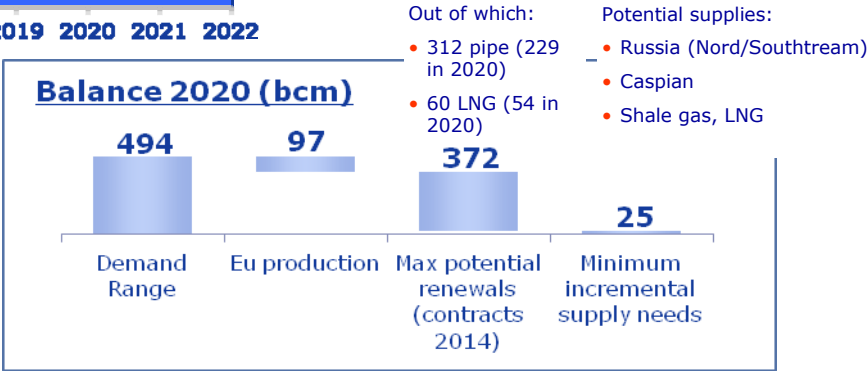


# ... and a revised view on new gas needs...

### EU27 demand and supply projections



Sensitivities on GDP, renewables, energy efficiency nuclear



Source: IEA, Enel, Gas Strategies, Poten



## ... with strong EU regulatory goals may lead to structural changes to the gas market over the next decade...

### 3<sup>rd</sup> package implementation

#### Binding Network Codes

- Capacity Allocation Mechanisms (CAM): simultaneous auctions of bundled entry-exit standard capacity
- Harmonization of other codes (e.g. tariffs, balancing, interoperability)

#### Direct reform of Regulation 715/09

- Congestion Management Procedures (CMP) to remove contractual congestions and bring unused capacity back to the market

#### Infrastructure package

- Measures to facilitate the implementation of projects of common interest (streamlined permit granting and public participation, financial incentives, etc.)

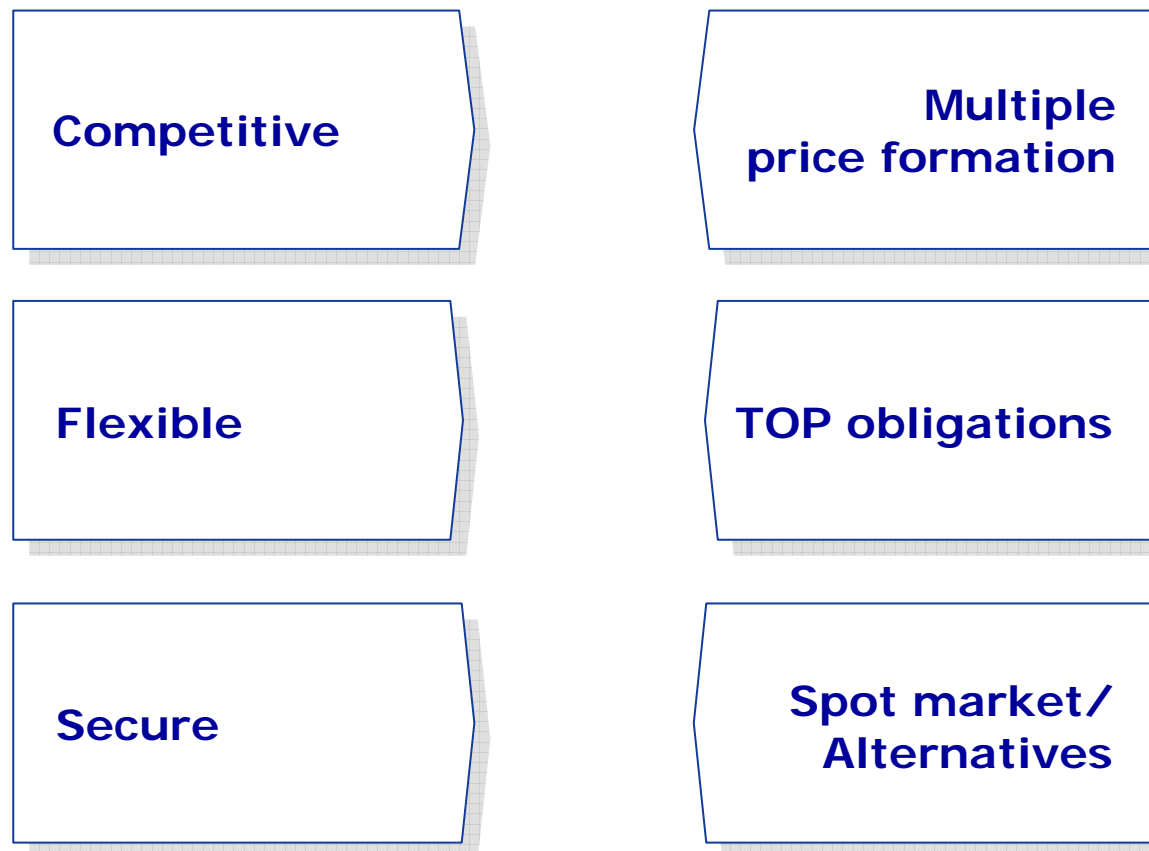
#### National initiatives

- Italian and French regulators increasing the share of final tariff linked to traded hubs

- Greater integration of European markets
- Increasing trading across borders
- Faster development of infrastructures
- Greater pressure on market / pricing alignment



**... to ensure that gas supplies are aligned with market needs**



## Conclusions

Uncertain demand  
sensitive to price and flexibility

Greater gas market integration

What about risks for producers?

